APPENDIX 3. WATERBIRD CONSERVATION STATUS ASSESSMENT FOR BIRD CONSERVATION REGIONS IN THE INTERMOUNTAIN WEST REGION (BCR 9, 10, 15, AND 16).

This appendix details the metholdologies used to rank waterbird species priorities and assign numerical population objectives to priority species. The national planning team provided preliminary information on colonial waterbird species abundance and concern rankings for each BCR (Table 1); marshbird species had not been ranked. However, in some cases, abundance estimates were based on incomplete information and inaccurate assumptions on how to split populations by BCR. In this Plan, we will assess species population sizes and concern categories on a regional basis. Note that the species are listed in Sibley-Monroe order (Sibley and Monroe 1990), as this is the standard for NAWCP.

At the Flyway level, there are Flyway Management Plans which provide goals and objectives for specific populations of Sandhill Cranes: Central Valley Population of Greater Sandhill Cranes (CVP), Lower Colorado River Valley Population of Greater Sandhill Cranes (LCRVP), Mid-Continent Population of Sandhill Cranes (MCP), Pacific Flyway Population of Lesser Sandhill Cranes (PFP), and Rocky Mountain Population of Greater Sandhill Cranes (RMP) (Central and Pacific Flyway Councils 1993, 1997; Pacific Flyway Council 1983, 1995, 1997). State concern listings also vary with different populations: all Sandhill Crane subspecies are listed as Endangered in Washington, only the greater subspecies is listed as Sensitive in Oregon, and the greater subspecies is listed as Threatened in California, while the lesser subspecies is listed as a Species of Special Concern. Greaters are a Species of Concern in Colorado and are Focal in Nevada, while all Sandhill Cranes are focal in Idaho. Therefore, each population is addressed in this Plan.

DETERMINING SPECIES PRIORITIZATION

In order to prioritize waterbird species and derive objectives, we needed to assess their status within each of the four BCRs in the Intermountain West. This involved several steps:

- 1. Estimating BCR population numbers and data quality for species where enough data was available.
- 2. Determining Area Importance (AI) scores for each species (using the NAWCP scores as a guide). AI scores for each species in each BCR were based on regional population size and contribution to total North American population. Using the 1-5 scale from the Partners In Flight protocol, AI scores for colonial species within each BCR were generated, with species that received an score of 5 having more than 50% of their population breeding in that particular BCR.
- 3. Reviewing species status on state endangered, threatened, sensitive, and species of concern lists, and PIF plans priority species lists.
- 4. Reviewing concern matrix table developed by the national planning team..
- 5. Developing regional criteria for ranking water bird species in concern categories.
- 6. Developing a concern matrix to assist in identifying priority species in each BCR.
- 7. Producing a final waterbird priority list for each BCR.
- 8. Assign numerical objectives for priority species by BCR and State.

Table 1. Area Importance (AI) scores¹ and Regional Concern Categories for colonial waterbirds, estimated by the national planning team for the North American Waterbird Conservation Plan.

Species	BCR	Estimated North American population	Estimated # of birds in BCR	%in BCR	AI score	Notes on BCR numbers	Regional concern category
Ring-billed Gull	9	~1,700,000 bre eders (estimates total 1,680,000)	Estimate d 24,900 breed ers	1.5%	2	Calcuated from BNA estimates of numbers for western USA + 3,700 which is (number of birds not specifically divided into BCRs) / (number of BCRs in which species breeds)	Not at risk
	10	~1,700,000 breeders (estimates total 1,680,000)	Estimate d 37,450 breed ers	2.2%	2	Calculated from BNA estimates of numbers for portion of Alberta, portion of BC, portion of wes tern USA + 3,700 which is (number of birds not specifically divided into BCRs) / (number of BCRs in which species breeds)	Not at risk
	15	~1,700,000 bre eders (estimates total 1,680,000)	wintering only				Not at risk
	16	~1,700,000 bre eders (estimates total 1,680,000)	wintering and migratory only				Not at risk
California Gull	9	> 414,000 breed ers (estimates total 413,500)	Estimate d 130,389 bree ders	31.5%	4	Calculated numbers from 8 colonies in Nevada, portion of the 7 colonies in Oregon, 11 colonies in Washington, 9 colonies (1 larger than 20,000 birds) in ID, 19 colonies (1 larger than 20,000 birds) in UT and portion of 13 colonies in CA (1 larger than 20,000 birds) (BNA appendix 1)	Mode rate
	10	> 414,000 breed ers (estimates total 413,500)	Estimate d 17,844 breeders	4.3%	2	Calculated p ortion of the 7 colonies in O regon, 1 colony in British Columbia, portion of the 19 colonies in MT, 6 colonies in WY (BNA appendix 1)	Mode rate
	15	> 414,000 breed ers (estimates total 413,500)	Estimate d 3,564 breeders	0.9%	1	Calculated portion of the 13 colonies (1 larger than 20,000 birds) in California, (BN A appendix 1)	Mode rate
	16	> 414,000 breed ers (estimates total 413,500)	Estimate d 2,970 breeders	0.7%	1	Calculated portion of the 5 colonies in Colorado (BNA - appendix 1)	Moderate
Glaucous-winged Gull	9	380,000 breeders (estimates total 353,000)	?	<1%	1	small portion of Was hington and British Columbia breeding populations.	Low
Thayer s Gull	15	<10,000 individuals in Canada	migratory only				Mode rate

¹ Based on percentage of population occurrence in a given BCR: >50%=5, 25-49%=4, 10-24%=3, 1-9%=2, <1%=1.

Table 1 (cont.). Area Importance (Al) scores¹ and Regional Concem Categories for colonial waterbirds, estimated by the national planning team for the North American Waterbird Conservation Plan.

Species	BCR	Estimated North American population	Estimated # of birds in BCR	%in BCR	AI score	Notes on BCR numbers	Region al concern category
Herring Gull	9	>246,000 breed ers (estimates total 250,900)	wintering and migratory only				Low
	10	>246,000 breed ers (estimates total 250,900)	small number of estimated breeders	<1%	1	No good population estimates. Estimated using BNA distribution map.	Low
	15	>246,00 0 breed ers (estimates total 250,900)	migratory only				Low
	16	>246,000 breed ers (estimates total 250,900)	wintering and migratory only				Low
Bonaparte s Gull	9	?	migratory only				Mod-Not at risk
	10	?	small numb ers	<1%	1	No information available. Probably very small numbers since breeding range only slightly overlaps with BCR 10.	Mod-Not at risk
	15	?	migratory only				Mod-Not at risk
	16	?	migratory only				Mod-Not at risk
Franklin s Gull	9	315,608 - 990,864 (653,236) breede rs	Estimated 8,558 - 23,764 (16,161) b reeders	2.5%	2	Calculated from estimates in BNA, 1994, appendix 1.	Mode rate
	10	315,608 - 990,864 (653,236) breeders	Estimated 11,200-30,450 (20,825) breeders	3.2%	2	Calculated from estimates in BN A 1994, appendix 1	Mode rate
	16	315,608 - 990,864 (653,236) breede rs	Estimated 250 - 600 (425) breeders	<1%	1	Calcula ted from es timates in BN A 1994, appendix 1	Mode rate
Cas pian Te rn	9	66,000 - 70,000 b reeders (estimates total 70,000)	Estimate d 416 b reeders	0.6%	1	Calculated (number of birds out of total estimate that were not divided in a BCR) / 9 BCRs remaining with no number estimates	Low
	10	66,000 - 70,000 breeders (estimates total 70,000)	Estimate d 416 b reeders	0.6%	1	Calculated (number of birds out of total estimate that were not divided in a BCR) / 9 BCRs remaining with no number estimates	Low
	15	66,000 - 70,000 b reeders (estimates total 70,000)	Estimate d 416 b reeders	0.6%	1	Calculated (number of birds out of total estimate that were not divided in a BCR) / 9 BCRs remaining with no number estimates	Low

¹ Based on percentage of population occurrence in a given BCR: >50%=5, 25-49%=4, 10-24%=3, 1-9%=2, <1%=1.

Table 1 (cont.). Area Importance (AI) scores¹ and Regional Concem Categories for colonial waterbirds, estimated by the national planning team for the North American Waterbird Conservation Plan.

Species	BCR	Estimated North American population	Estimated # of birds in BCR	%in BCR	AI score	Notes on BCR numbers	Region al concern category
Commo n Tern	9	300,000 breeders (estimates total 300,000)	suspected (and former) bree der in Id aho	<1%	1	Comments from G. Ivey and C. Herziger	Low
	10	300,000 breeders (estimates total 300,000)	migratory only				Low
	16	300,000 breeders (estimates total 300,000)	migratory only				Low
Forster s Tern	9	47,000 - 51,500 b reeders (estimates total 49,500)	?			No information	Mode rate
	10	47,000 - 51,500 b reeders (estimates total 49,500)	?			No information	Mode rate
	15	47,000 - 51,500 b reeders (estimates total 49,500)	migratory only				Mode rate
	16	47,000 - 51,500 b reeders (estimates total 49,500)	?			No information	Mode rate
Black T ern	9	100,000-500,000 breed ers (estimates total ~300,000)	Estimated 11,200 breeders	3.7%	2	Estimated from numbers in status assessment and conservation plan: out of 30 0,0 00 bre eders, half of Oregon #s + half of ID #s+225 for Ruby Lake, NV+10,600 (the remainder of the population that is not specifically divided) / 18 BCRs	Mode rate
	10	100,000-500,000 breed ers (estimates total ~300,000)	Estimate d 10,975 breed ers	3.6%	2	Estimated from numbers in status assessment and conservation plan: out of 30 0,0 00 bre eders, half of Oregon #s + half of ID #s+10,600 (the remainder of the population that is not specifically divided) / 18 BCRs	Mode rate
	15	100,00 0-500,00 0 breed ers (estimates total ~300,000)	migratory only				Mode rate
	16	100,000-500,000 breed ers (estimates total ~300,000)	Estimate d 10,600 breed ers	3.5%	2	Estimated from numbers in status assessment and conservation plan: out of 3 00,0 00 b reed ers, 1 0,600 is (the remainder of the population that is not specifically divided) / 18 BCRs	Mode rate

¹ Based on percentage of population occurrence in a given BCR: >50%=5, 25-49%=4, 10-24%=3, 1-9%=2, <1%=1.

Table 1 (cont.). Area Importance (Al) scores¹ and Regional Concem Categories for colonial waterbirds, estimated by the national planning team for the North American Waterbird Conservation Plan.

BCR	Estimated North American population	Estimated # of birds in BCR	%in BCR	AI score	Notes on BCR numbers	Region al concern category
9	3,500,000 - 4,100,000 individuals (fall population)	Estimate d 800,000 individuals	20.0%	3	Estimated large portion of approximately 4,000,000 individuals	Mode rate
10	3,500,000 - 4,100,000 individuals (fall population)	Estimate d 119,000 individuals	3.0%	2	Estimated medium portion of approximately 4,000,000 individuals	Mode rate
15	3,500,000 - 4,100,000 individuals (fall population)	Estimate d 89,000 individuals	2.2%	2	Estimated small portion of approximately 4,000,000 individuals	Mode rate
16	3,500,000 - 4,100,000 individuals (fall population)	Estimate d 800,000 individuals	20.0%	3	Estimated large portion of approximately 4,000,000 individuals	Mode rate
9	>110,000 breed ers	Estimate d 9,200 breeders	8.4%	2	Calculated > 110,000 breed ers in US and Canada / 12 B CRs in US and C anada where species occurs	Mode rate
10	>110,000 breed ers	Estimate d 9,200 breeders	8.4%	2	Calculated > 110,000 breed ers in US and Canada / 12 B CRs in US and C anada where species occurs	Mode rate
15	>110,000 breed ers	Estimate d 9,200 breeders	8.4%	2	Calculated > 110,000 breed ers in US and Canada / 12 B CRs in US and C anada where species occurs	Mode rate
16	>110,000 breed ers	Estimate d 9,200 breeders	8.4%	2	Calculated > 110,000 breed ers in US and Canada / 12 B CRs in US and C anada where species occurs	Mode rate
9	10,000-20,000 individuals (estimates total ~10,000)	Estimated 588 breeders	5.9%	2	Not much information available; calculation 10,000 total breeders / 17 BCRs in which the species breeds	Low
10	10,000-20,000 individuals (estimates total ~10,000)	Estimate d 588 b reeders	5.9%	2	Not much information available; calculation 10,000 total breeders / 17 BCRs in which the species breeds	Low
15	10,000-20,000 individuals (estimates total ~10,000)	Estimated 588 breeders	5.9%	2	Not much information available; calculation 10,000 total breeders / 17 BCRs in which the species breeds	Low
16	10,000-20,000 individuals (estimates total ~10,000)	Estimate d 588 b reeders	5.9%	2	Not much information available; calculation 10,000 total breeders / 17 BCRs in which the species breeds	Low
	9 10 15 16 9 10 15 16 9 10 15	American population 9	American population BCR 9 3,500,000 - 4,100,000 individuals (fall population) Estimated 800,000 individuals 10 3,500,000 - 4,100,000 individuals (fall population) Estimated 119,000 individuals 15 3,500,000 - 4,100,000 individuals (fall population) Estimated 89,000 individuals 16 3,500,000 - 4,100,000 individuals (fall population) Estimated 9,200 breeders 9 >110,000 breeders Estimated 9,200 breeders 10 >110,000 breeders Estimated 9,200 breeders 15 >110,000 breeders Estimated 9,200 breeders 16 >110,000 breeders Estimated 9,200 breeders 16 >110,000 breeders Estimated 588 breeders 9 10,000-20,000 individuals (estimates total ~10,000) Estimate d 588 breeders 10 10,000-20,000 individuals (estimates total ~10,000) Estimate d 588 breeders 15 10,000-20,000 individuals (estimates total ~10,000) Estimate d 588 breeders	Section Sect	American population BCR score 9 3,500,000 - 4,100,000 individuals (fall pop ulati on) Estimate d 800,000 individuals (20.0% 3 10 3,500,000 - 4,100,000 individuals (fall pop ulati on) Estimate d 119,000 individuals (3.0% 2 15 3,500,000 - 4,100,000 individuals (fall pop ulati on) Estimate d 89,000 individuals (2.2% 2 16 3,500,000 - 4,100,000 individuals (fall pop ulati on) Estimate d 800,000 individuals (20.0% 3 9 >110,000 breed ers Estimate d 9,200 breeders 8.4% 2 10 >110,000 breed ers Estimate d 9,200 breeders 8.4% 2 15 >110,000 breed ers Estimate d 9,200 breeders 8.4% 2 16 >110,000 breed ers Estimate d 9,200 breeders 8.4% 2 9 10,000-20,000 individuals (estimates total ~10,000) Estimate d 588 breeders 5.9% 2 10 10,000-20,000 individuals (estimates total ~10,000) Estimate d 588 breeders 5.9% 2 15 10,000-20,000 individuals (estimates total ~10,000) Estimate d 588 breeders 5.9% 2	American population BCR BCR score 9 3,500,000 - 4,100,000 individuals (all population) Estimated 800,000 individuals 20.0% 3 Estimated large portion of approximately 4,000,000 individuals (all population) Estimated 119,000 individuals (all population) Estimated 119,000 individuals (all population) Estimated 89,000 individuals (all population) Estimated 89,000 individuals (all population) Estimated 89,000 individuals (all population) Estimated 800,000 individuals (all population) Estimated 9,200 breeders 8.4% 2 Calculated >110,000 breeders in US and Canada / 12 B CRs in US and Canada where species occurs 10 >110,000 breeders Estimated 9,200 breeders 8.4% 2 Calculated >110,000 breeders in US and Canada / 12 B CRs in US and Canada where species occurs 15 >110,000 breeders Estimated 9,200 breeders 8.4% 2 Calculated >110,000 breeders in US and Canada / 12 B CRs in US and Canada where species occurs 16 >110,000 breeders Estimated 9,200 breeders 8.4% 2 Calculated >110,000 breeders in US and Canada / 12 B CRs in US and Canada where species occurs 9 10,000-20,000 individuals (estimates total ~10,000) Estimated 588 breeders 5.9% 2 Not much information available; calculation 10,000 total breeders / 17 B CRs in which the species breeds 15 10,000-20,000 individuals (estimates total ~10,000) Estimated 588 breeders 5.9% 2 Not much information available; calculation 10,000 total breeders / 17 B CRs in which the species breeds 16 10,000-20,000 individuals (estimates total ~10,000) Estimated 588 breeders 5.9% 2 Not much information available; calculation 10,000 total breeders / 17 B CRs in which the species breeds

¹ Based on percentage of population occurrence in a given BCR: >50%=5, 25-49%=4, 10-24%=3, 1-9%=2, <1%=1.

Table 1 (cont.). Area Importance (Al) scores¹ and Regional Concem Categories for colonial waterbirds, estimated by the national planning team for the North American Waterbird Conservation Plan.

Species	BCR	Estimated North American population	Estimated # of birds in BCR	%in BCR	AI score	Notes on BCR numbers	Region al concern category
Double-crested Cor mora nt	9	>740,000 breed ers (estimates total 740,000)	Estimate d 8,343 breeders	1.1%	2	Calculated a portion of Nevada and Utah numbers plus klaho, Oregon and Washington numbers from Hatch 1995 plus additional numbers not divided into specific BCRs with info from Hatch 1995.	Not at risk
	10	>740,00 0 breed ers (estimates total 740,000)	Estimated 5,233 breeders	0.7%	1	Calculated a portion of Montana and Wyoming numbers from Hatch 1995 plus additional numbers not divided into specific BCRs with info from Hatch 1995.	Not at risk
	15	>740,000 breed ers (estimates total 740,000)	migratory only				Not at risk
	16	>740,000 breed ers (estimates total 740,000)	Estimate d 4,827 breeders	0.7%	1	Calculated a portion Colorado and Utah numbers plus New Mexico numbers from Hatch 1995 plus additional numbers not divided into specific BCRs with info from Hatch 1995.	Not at risk
Snowy Egret	9	>143,000 breed ers (estimates total >143,555)	?			No information	High
	10	>143,00 0 breed ers (estimates total >143,555)	?			No information	High
	16	>143,000 breed ers (estimates total >143,555)	?			No information	High
Great Blue Heron	9	>83,000 breeders (estimates equal 88,991)	?			No information	Not at risk
	10	>83,000 breeders (estimates equal 88,991)	?			No information	Not at risk
	15	>83,000 breeders (estimates equal 88,991)	migratory only				Not at risk
	16	>83,000 breeders (estimates equal 88,991)	?			No information	Not at risk
Great Egret	9	No population estimate; >180,000 breed ers	Estimated 1,610-1,810 breeders	<1%	1	Calculated numbers for NV in 86 and OR in 84 (BNA)	Not at risk
	16	No population estimate; >180,000 breed ers	?	<1%	1	No good population estimates. Estimated using BBS map of bree ding distribution.	Not at risk

¹ Based on percentage of population occurrence in a given BCR: >50%=5, 25-49%=4, 10-24%=3, 1-9%=2, <1%=1.

Table 1 (cont.). Area Importance (AI) scores¹ and Regional Concem Categories for colonial waterbirds, estimated by the national planning team for the North American Waterbird Conservation Plan.

Species	BCR	Estimated North American population	Estimated # of birds in BCR	%in BCR	AI score	Notes on BCR numbers	Regional concern category
Cattle Egret	9	?	?	<1%	1	No reliable population estimates.	Not at risk
	10	?	?	<1%	1	Estim ated using BBS map of breeding distribution.	Not at risk
	15	?	migratory/dis persal only				Not at risk
	16	?	?	<1%	1	Estimated using BBS map of breeding distribution.	Not at risk
Green Heron	15	?	migratory/dis persal only				Low
Black-crowned Night-Heron	9	>50,000 breeders (does n t include Central America)	?			No information	Mode rate
	10	>50,000 breeders (does n t include Central America)	?			No information	Mode rate
	15	>50,000 breeders (does n t include Central America)	?			No information	Mode rate
	16	>50,000 breeders (does n t include Central America)	?			No information	Mode rate
White-face d Ibis	9	>100,000 breed ers (estimates total 93,500)	estimate d 14,000 breed ers	15.0%	3	Calculated from estimate in Ivey, G. et al., 2001 of 35,000+ breeders in OR, CA, ID, NV & UT in late 90's /5 BCRs	Low
	10	>100,00 0 breed ers (estimates total 93,500)	estimate d 14,000 breed ers	15.0%	3	Calculated from estimate in Ivey, G. et al., 2001 of 35,000+ breeders in OR, CA, ID, NV & UT in late 90's /5 BCRs	Low
	15	>100,000 breed ers (estimates total 93,500)	estimate d 14,000 breed ers	15.0%	3	Calculated from estimate in Ivey, G. et al., 2001 of 35,000+ breeders in OR, CA, ID, NV & UT in late 90's /5 BCRs	Low
	16	>100,00 0 breed ers (estimates total 93,500)	estimate d 14,000 breed ers	15.0%	3	Calculated from estimate in Ivey, G. et al., 2001 of 35,000+ breeders in OR, CA, ID, NV & UT in late 90's /5 BCRs	Low
American White Pelican	9	>120,000 breed ers (estimates total 152,300)	4,460 estimated breeders	2.9%	2	Calculated 10% of 22,299 nes ts in U.S. (1980-81) (BNA p 15)	Mode rate
	10	>120,00 0 breed ers (estimates total 152,300)	9,810 estimated breeders	6.4%	2	Calculated 10% of 22,299 nests in U.S. (1980-81) plus estimated 5% of 53,345 C anadian nests (1985-86) (BN A - p 15)	Mode rate
	15	>120,00 0 breed ers (estimates total 152,300)	4,460 estimated breeders	2.9%	2	Calculated 10% of 22,299 nests in U.S. (1980-81) (BNA p 15)	Moderate
	16	>120,00 0 breed ers (estimates total 152,300)	4,460 estimated breeders	2.9%	2	Calculated 10% of 22,299 nests in U.S. (1980-81) (BNA p 15)	Moderate

¹ Based on percentage of population occurrence in a given BCR: >50%=5, 25-49%=4, 10-24%=3, 1-9%=2, <1%=1.

Estimate BCR population numbers. Population estimates are precise and reliable for only some of the species covered by this Plan, comprehensive data is lacking for many species, and there is no reliable data for some. Populations of waterbirds that are historically of management concern are generally well known, such as American White Pelicans and Sandhill Cranes (listed as both a game species and Focal in some states). For these species, specific inventories and surveys have been conducted which can be used to estimate population size and trends. For most species, the data currently available are a mix of survey quality and of different survey periods which makes them less reliable as population estimates. For migrant species, data was gathered from important sites but not combined because migrants numbers are not necessarily additive. For examples of staging sites which support a large percentage of populations, the species is listed as a migrant in a separate category from breeding. Table 2 summarizes categories used to classify data quality of the species assessed. Tables 3, 4, 5, and 6 summarize available population data for waterbirds in each BCR.

PLEASE REVIEW AND COMMENT ON THESE DATA QUALITY CATEGORIES IN TABLE 2.

Table 2. Indices used to denote data quality for waterbird species covered by the Intermountain West Region Waterbird Conservation Plan.

Data Quality index	Data quality description
5	Population estimate is likely within $\pm~10\%$ of actual population. Recent comprehensive surveys have been conducted.
4	Population estimate is likely within \pm 11-25% of actual population. Recent review of status, but incomplete survey data throughout the BCR.
3	Population estimate is likely within \pm 26-50% of actual population. Estimate is a mix of data quality between years and different survey efforts at different sites within the BCR.
2	Population estimate is likely within ± 51 -100% of actual population. Species difficult to survey or widely dispersed among unsurveyed areas.
1	Available data is insufficient for population estimate.

THE FOLLOWING TABLES ARE DATA SUMMARIES FOR EACH SPECIES BY STATE. THIS IS YOUR LAST CHANCE TO CHANGE OR ADD ANY POP. DATA FOR THIS VERSION OF THE PLAN. CHANGES IN THESE NUMBERS CAUSES MULTIPLE CHANGES OF SCORING, RANKING, ETC. THROUGHOUT THE PLAN.

Table 3. Population estimates and data quality of waterbird species in Bird Conservation Region 9 (b = breeding, m = migrant).

Species	Population data	Site estimate	Total pop.	Data quality	Source
Greate r Sandhill Crane (CVP) (b)			3,777	5	
CA	2,000: 1,113	1,113			Ivey and Herziger 2001
NV	1999: 22	22			Ivey and Herziger 2000
OR	1999-00: 2,592	2,592			Ivey and Herziger 2000
WA	2001: 50	50			Littlefield and Ivey 2002
Greater Sandhill Crane (CVP) (m)			unknown	4	
CA	Ash Creek WA peak: 336	336		ļ	G. Ivey, unpub. data
CA	Lower Klamath NWR peak in 1998: 1,385	1,385			Littlefield and Ivey 2002
OR	Malheur NWR peak 1998: 668	668		ļ	G. Ivey, unpub. data
OR	Summer Lake WA 1998: 415	415			G. Ivey, unpub. data
Greater Sandhill Crane (LCRVP) (b)	Est. 95% of pop. in this BCR		1,900	5	R. Drewien, pers. comm.
ID	unknown	unknown		ļ	
NV	unknown	unknown			
UT	unknown	unknown			
Greater Sandhill Crane (LCRVP) (m)			unknown	2	
NV	Lund in 1993: 376	376			Pacific Flyway Council 1985
Greater Sandhill Crane (RMP) (b)	Est. 10% of pop. in this BCR		1,868	4	R. Drewien, pers. comm.
	unkno wn	unknown			
	unknown	unknown			
Lesser Sandhill Crane (PFP) (m)	Entire pop. through CA, OR, WA		unknown	2	Pacific Flyway Council 1983
Yellow Rail (b)			520	4	
CA	former bree der Mo no Cou nty	0			Grinnell and Miller 1944
OR	avg. 260 pairs	520			Lundsten and Popper 2002
Virginia Rail (b)	insufficient da ta		unknown	1	
Sora (b)	insufficient da ta		unknown	1	
Common Moorhen (b)	NV unknown, insufficient data		unknown	1	L. Neel, pers. comm.
Americ an Coot (b)	insufficient da ta		unknown	1	
Ring-billed Gull (b)			71,462	3	
CA	NE CA avg. 1994-97:11,448 pairs	22,896			Shuford and Ryan 2000
ID	S. ID 1993: 7,000 nests	14,000			Trost and Gerstell 1994
NV	Est. 700 breeding pop.	700			L. Neel, pers. comm.
OF	Gerber Reserv oir 2003 : 1,024 pairs	2,048			Shuford et al. 2004
OF	MNW R 1990-98 avg.: 150 nes ts	300			G. Ivey, unpub. data
OF	Swan Lake 2003: 5,673 pairs	11,346			Shuford et al. 2004
OF	Warner Ba sin: 586 pairs	1,172			Stern 1988
UT	Est. 5,000 breeding pop.	5,000			D. Paul, pers. comm.
WA	1996: 7,000 pairs	14,000			Smith et al. 1997

Table 3. Population estimates and data quality of waterbird species in Bird Conservation Region 9 (cont.) (b = breeding, m = migrant).

Species	Population data	Site	Total	Data	Source
	•	estimate	pop.	quality	
California Gull (b)			308,062	3	
(A NE C A av g. 1994-97: 31,23 6 pairs	62,472			Shuford and Ryan 2000
	D S. ID 1993:36,200 nests	72,400			Trost and Gerstell 1994
Ŋ	V Est. 4,200 breeding pop.	4,200			L. Neel, pers. comm.
(R MNW R 1990 -98 avg.: 560 nests	1,120			G. Ivey, unpub. data
(R Swan Lake 2003: 1,832 pairs	3,664			Shuford et al. 2004
(R Warner Basin: 301 pairs	206			Stern 1988
τ	T Est. 150,000 breeding pop.	150,000			D. Paul, pers. comm.
W	A 1996: 7,000 pa irs	14,000			Smith et al. 1997
Glauc ous-winged Gull (b)	Columbia River (east)	<1%	unknowr	1	Conover & Thompson 1984
Herring Gull (m)	insufficient da ta		unknowr	1	
Bonaparte s Gull (m)	insufficient da ta		unknowr	1	
Franklin s Gull (b)			42,076	3	
(A Lower Klamath NWR: 154 breeding pop.	154			Shuford et al. 2004
	D Camas NWR: 5,000 breeding pop.	5,000			S. Bouffard, pers. comm.
	D Market L/O xford S1 WM A:3,000 bree ding	3,000			S. Bouffard, pers. comm.
1	V Zero	0			L. Neel, pers. comm.
(R MNW R 1990 -98 avg.: 1,635 nes ts	3,270			G. Ivey, unpub. data
1	Est. 30,652 breeding pop.	30,652			D. Paul, pers. comm.
Cas pian Tern (b)			2,310	4	
(A Avg. 1 997-01: 426 nests	852			Shuford and Craig 2002
	D S. ID 1993: 59 nests	118			Trost and Gerstell 1994
1	V Avg. 1997-01: 137 nests	274			Shuford and Craig 2002
(R Avg. 1997-01: 327 nests	654			Shuford and Craig 2002
1	T Est. 100 breeding pop.	100			D. Paul, pers. comm.
V	A Avg. 1997-01: 156 nests	312			Shuford and Craig 2002
Commo n Tern (b?)	ins uffici ent da ta (for mer bree der in ID)		unknowi	1	Trost and Gerstell 1994
Forster s Tern (b)			7,299	2	
(A NE CA 1997: 1,756 nests	3,212			Shuford 1998
	D S. ID 1993: 20 nests	40			Trost and Gerstell 1994
1	V Est. 150 breeding pop.	150		<u>.</u>	L. Neel, pers. comm.
	R Klama th Bas in (OR) 2003: 1,411 breeding	1,411			Shuford et al. 2004
	PR MNW R 1990 - 98 est. avg.: 100 nests	200			G. Ivey, unpub. data
1	IT Est. 1,586 breeding pop.	1,586			D. Paul, pers. comm.
	A Est. 400 breeding pop.	400			R. Friesz, pers. comm.
Black T ern (b)	Est. 100 bleeding pop.	100	5,916	4	rt. 111652, pers. comm.
	A NE CA 1007: 1 840 mosts	2 609	3,710		Shuford 1998
•	A NE CA 1997: 1,849 nests ID S. ID 1993: 79 nests	3,698]	Trost and Gerstell 1994
,		158			
	Ruby L. N WR av g.: 275 nests	550			Shuford 1999 G. Ivey, unpub. data
,	OR MNW R 1990 -98 est. avg. 15 0 nests Sycan Marshavg.: 300 nests	300 600			Shuford 1999
	Warner Ba sin: 95 pairs	190			Stern 1988
	UT Est. 120 breeding pop.	120			D. Paul, pers. comm.
V	A Est. 300 breeding pop.	300			R. Friesz, pers. comm.

Table 3. Population estimates and data quality of waterbird species in Bird Conservation Region 9 (cont.) (b = breeding, m = migrant).

Species		Population data	Site	Total	Data	Source
			estimate	pop.	quality	
Pied-bille d Greb e (b)		insufficient da ta		unknown	1	
Red-nec ked G rebe (b)				28	3	
	OR	Upper Klamath L.: 28	28			Spencer 2003d
Horned G rebe (b)		insufficient da ta		unknown	1	
Eared G rebe (b)				29,375	3	
	CA	Eagle Lake 1996-97 avg.: 2,715 nests	5,430			Shaw 1998
	CA	Hunt clubs near LKNW R 2003: 475 pairs	950			Shuford et al. 2004
	CA	Indian Tom Lake 2003: 9 pairs	18			Shuford et al. 2004
	CA	LKNWR 2003: 2,071 pairs	4,142			Shuford et al. 2004
	CA	Mtn Mea dows Res. 19 99: 300 pairs	600			Cooper 2004
	CA	Shasta Valley WA est. avg.: 50 nests	100		ļ	R. Smith, pers. comm
	CA	TLNW R 2003: 5,305 pairs	10,610			Shuford et al. 2004
	ID	S. ID 1993: 324 ne sts	648		ļ	Trost and Gerstell 1994
	NV	Est. 225 breeding pop.	225			L. Neel, pers. comm.
	OR	Cope land Res . 1998: 22 pairs	44		ļ	Spencer 2003b
	OR	Difficulty Res. 2000: 50 pairs	100			Spencer 2003b
	OR	Klamath Basin (OR) 2003: 2,196	2,196			Shuford et al. 2004
	OR	MNW R 1990 -98 avg.: 556 nes ts	1,112			G. Ivey, unpub. data
	OR	Rabbit Valley Res. 2000: 250 nests	500			Spencer 2003b
	UT	Est. 1,200 breeding pop.	1,200			D. Paul, pers. comm.
	WA	Est. 1,500 breeding pop.	1,500			R. Friesz, pers. comm.
Eared Grebe (m)				unknown	4	
	CA	Mono L.: 2,000,000	2,000,000			Boyd and Jehl 1998
	NV	Est. >5,000	5,000			L. Neel, pers. ocmm.
	OR	Lake Abert avg.: 21,500	21,500			W. Deva urs, pers. comm.
	UT	Est. 1,029,600	1,029,600			D. Paul, pers. comm.
	WA	Est. 1,200	1,200			R. Friesz, pers. comm.
Western Grebe (b)				9,758	3	
	СА	Eagle Lake avg. 1996-03: 1,626 nests	3,252			Ivey 2004
	CA	Indian Tom Lake 2003: 9 nests	18			D. Shuford, pers. comm.
	CA	LKNWR 2003: 37 nests ¹	74			USFWS data
	CA	Shasta Valley W A av g.: 13 nests	26			R. Smith, pers. comm.
	CA	TLNWR 2003: 636 nests ¹	1,272			USFWS data
	ID	Minidoka NWR: 267 nests	534			S. Bouffard, pers. comm.
	ID	Other sites S. ID 1993: 330 nests	660			Trost and Gerstell 1994
	NV	Est. 50 breeding pop.	50			L. Neel, pers. comm.
		MNW R 1990 - 98 est.: 300 nests	600			G. Ivey, unpub. data
	OR	Spring Lake 2003: 74 breeding pop.	74			USFWS data 2003
		Summer Lake WA avg.: 30 nests	60			M. St. Louis, pers. comm.
		UKNW R 2003 : 848 nests	1,696			Shuford et al. 2004
		Warner Ba sin: 21 pa irs	42			Stern 1988
		Est. 400 breeding pop.	400			D. Paul, pers. comm.
		Est. 1,000 breeding pop.	1,000			R. Friesz, pers. comm.

Surveys did not separate out Aechmophorus species and may include Clark s grebes.

Table 3. Population estimates and data quality of waterbird species in Bird Conservation Region 9 (cont.) (b = breeding, m = migrant).

Species	Population data	Site	Total		Source
	,	estimate	pop.	quality	
Clark s Gre be (b)	A F 1 A 1 1000 02 101	262	2,440	3	1 2004
	A Eagle Lake 1996-03 avg.: 181 nests	362			Ivey 2004
	A Goos e L. 2003 : 60 nests	120			Ivey 2004
	D S. ID 199 3: 103 ne sts	206			Trost and Gerstell 1994
1	D Minidoka NWR: 133 nests	266			S. Bouffard, pers. comm.
	V Est. 300 breeding pop.	300			L. Neel, pers. comm.
C	R MNW R 1990 -98 est.: 100 nests	200			G. Ivey, unpub. data
C	R UKNW R 2003 : 293 pairs	586			Shuford et al. 2004
U	T Est. 300 breeding pop.	300			D. Paul, pers. comm.
W	A Est. 100 breeding pop.	100			R. Friesz, pers. comm.
Double-crested Cormorant (b)			10,502	3	
	A NE CA 1997: 1,394 nests	2,788			Shuford 1998
	D S. ID 1993: 1,366 nests	2,732			Trost and Gerstell 1994
N	V Est. 400 breeding pop.	400			L. Neel, pers. comm.
C	R Crane Prairie Res. avg.: 57 pairs	114			Matthews et al. 2003
C	R MNW R 1990-98 avg.: 308 nests	616			G. Ivey, unpub. data
	R Summer Lake WA 1998-00 avg.: 27 pairs R Swan Lake 2003: 43 pairs	54 86			M. St. Louis, pers. comm. Shuford et al. 2004
	R UKNW R 1997-01 avg: 646 nests	1,292			USFWS data
0	R Warner Ba sin 2002: 60 nests	120			C. Foster, pers. comm.
J	T Est. 800 breeding pop.	800			D. Paul, pers. comm.
W	A Est. 1,500 breeding pop.	1,500			R. Friesz, pers. comm.
Snowy Egret (b)			3,071	3	
	D S. ID 1993: 306 ne sts	612			Trost and Gerstell 1994
N	V Est. 300 breeding pop.	300			L. Neel, pers. comm.
N	V Ruby L. 1990-02 avg: 50 breeding pop.	50			J. Mackay, pers. comm.
	R Chewa ucan/Riv ers End: 40 nests	80			M. St. Louis, pers. comm.
	R MNW R 1990 -98 avg.: 33 nests	66			G. Ivey, unpub. data
	R Warner Basin: 10 pairs	20			Stern 1988
	T Fish Springs NWR: 593 breeding pop.	593			J. Banta, pers. comm.
	T GSL avg.: 1,350 breeding pop.	1,350			D. Paul, pers. comm.
Great B lue Heron (b)			4,432	2	
(A CLNW R 1997 -99 avg.: 35 nests	70			USFWS data
C	A LKNWR 1997-01 avg.: 20 nests	40			USFWS data
	D S. ID 1993: 898 ne sts	1,796			Trost and Gerstell 1994
N	V Est. 600 breeding pop.	600			L. Neel, pers. comm.
(R MNW R 1990 -98 avg.: 88 nests	176			G. Ivey, unpub. data
(R UKNWR 1997-01 avg.: 14 nests	28			USFWS data
(R Warner Ba sin 2002 : 25 nests	50			C. Foster/M. St. Louis, p. c.
	T Fish Springs NWR: 12 breeding pop.	12			J. Banta, pers. comm.
	T GSL avg.: 460 breeding pop.	460			D. Paul, pers. comm.
W	A Est. 1,200 breeding pop.	1,200			R. Friesz, pers. comm.

Table 3. Population estimates and data quality of waterbird species in Bird Conservation Region 9 (cont.) (b = breeding, m = migrant).

Species	Population data	Site estimate	Total pop.	Data quality	Source
Great E gret (b)			2,258	3	
	CLNW R 1997 -01 avg.: 39 nests	78			USFWS data
CA	LKNWR 1997-01 avg.: 282 nests	564			USFWS data
CA CA	TLNW R 1997-01 avg.: 41 nests	82			USFWS data
	S. ID 1993: 26 nests	52			Trost and Gerstell 1994
NV	Est. 225 breeding pop.	225			L. Neel, pers. comm.
NV	Ruby Lake 1990-02 avg.: 32 breeding pop.	32		ļ	J. Mackay, pers. comm.
OR	MNW R 1990 -98 avg. 247 nes ts	494			G. Ivey, unpub. data
OR	UKNW R 1997-01 avg.: 136 nests	272			USFWS data
OR	Warner Ba sin 2002: 126 nes ts	252			C. Foster/M. St. Louis, p. c.
UT	Fish Springs NWR: 2 breeding pop.	2			J. Banta, pers. comm.
UT	GSL avg.: 5 breeding pop.	5		ļ	D. Paul, pers. comm.
WA	Est. 200 breeding pop.	200			R. Friesz, pers. comm.
Cattle Egret (b)			922	3	
ID	S. ID 1993: avg. 33 nests	66			Trost and Gerstell 1994
NV	Est. 250 breeding pop.	250			L. Neel, pers. comm.
OR	MNW R est.: 3 nests	6			G. Ivey, unpub. data
UT	Est. 600 breeding pop.	600			D. Paul, pers. comm.
Green Heron (b)	insufficient data peripheml sp.		unknown	1	
Black-crowned Night-Heron (b)			5,480	2	
CA	CLNW R 1997 -00 avg.: 6 nests	12			USFWS data
CA	LKNWR 1997-01 avg.: 140 nests	280			USFWS data
CA	TLNW R 1997 -01: 8 nes ts	16			USFWS data
ID	S. ID 1993: 769 ne sts	1,538			Trost and Gerstell 1994
NV	Est. 800 breeding pop.	800			L. Neel, pers. comm.
OR	MNW R 1990-98 avg. 178 nests	356			G. Ivey, unpub. data
OR	Three Mile Is. 1991: 54 nests	108			Blus et al. 1997
OR	UKNW R 1997 -01 avg.: 30 nests	60			USFWS data
OR	Warner Ba sin 1987: 430 nes ts	860			Stern 1988
UT	Fish Springs NWR: 250 breeding pop.	250			J. Banta, pers. comm.
UT	GSL avg.: 200 breeding pop.	200			D. Paul, pers. comm.
WA	Est. 1,000 breeding pop.	1,000			R. Friesz, pers. comm.
Least Bittern (b)	insufficient da ta		unknown	1	
American Bittern (b)	insufficient da ta		unknown	1	
White-faced Ibis (b)			54,168	4	
CA	1997-99 avg.: 1,157 nests	2,314			Ivey et. al. 2004
ID	1997-99 avg.: 765 nests	1,530			Ivey et. al. 2004
NV	1997-99 avg.: 6,116 nests	12,232			Ivey et. al. 2004
OR	1997-99 avg.: 9,048 nests	18,096			Ivey et. al. 2004
UT	1997-99 avg.: 9,983 nests	19,996			Ivey et. al. 2004

Table 3. Population estimates and data quality of waterbird species in Bird Conservation Region 9 (cont.) (b = breeding, m = migrant).

Species	Population data	Site	Total	Data	Source
		estimate	pop.	quality	
American White Pelican (b)			32,441	4	
C	A CLNW R 1997-01 avg.: 1,831 nests	3,662			USFWS data
C	A LKNWR 1997-01 avg.: 114 nests	228			USFWS data
C	Meiss L. 1999-00: 15 nests	30			K. Novick, pers. comm.
1	D Blackfo ot Res. 2003: 8 37 nests	1,674			M. Wack enhut, pers. comm.
1	D Minidoka NWR: 450 nes ts	900			S. Bouffard, pers. comm.
N	V Anaho Is. 1997-01 avg: 7,035 nests	14,070			USFWS data
N	V Ruby Lake avg.: 61 breeding pop.	61			J. Macka y, pers. comm.
O	R MNW R 1990 -98 avg.: 273 nests	546			G. Ivey, unpub. data
C	R UKNW R 1997-01 avg.: 309 nests	618			USFWS data
C	Warner Ba sin 2002: 206 nes ts	412			M. St. Louis/C. Foster, p. c.
U	T Est. 10,000 breeding pop.	10,000			D. Paul, pers. comm.
W	A Columbia River: 120 nests	240			H. Browers, pers. comm.
American White Pelican (m)			unknown	4	
U	T Great Salt Lake: peaks of 56,000	50,000			D. Paul, pers. comm.
Common Loon(b)	Only in WA: 4 nest	8	8	5	Richardson et al. 2000
Commo n Loon (m)			unknown	2	
1	D Twin Falls Res.: 500	500			S. Bouffard, pers. comm.
]	D Other ID lakes: 500	500			S. Bouffard, pers. comm.
N	V Walker Lake avg.: 1,050	1,050			L. Neel, pers. comm.
	Est. 100	100			D. Paul, pers. comm.
	T A Est. 200+	200			R. Friesz, pers. comm.

Table 4. Population estimates and data quality of waterbird species in Bird Conservation Region 10 (b = breeding, m = migrant).

Species	Population da	ta	Site	Total		Source
Greate r Sandhill Crane (CVP) (b)			estimate	pop. 262	quality 5	
	R 1999-00: 262		262	202		Ivey and Herziger 2000
Greater Sandhill Crane (LCRVP) (b				100	3	
	Est. 50-100 bree	ding pop.	100			estimate
Greater Sandhill Crane RMP (b)	Est. ~88% breed	ing pop. in this BCR		16,515	4	R. Drewien, pers. comm.
	unknown		unknown			
N	unknown		unknown			
W	unkno wn		unknown			
Virginia Rail (b)	insufficient da ta			unknown	1	
Sora (b)	insufficient da ta			unknown	1	
Americ an Coot (b)	insufficient da ta			unknown	1	
Ring-billed Gull (b)				19,350	3	
	Est. 10,000 bree	ding pop.	10,000			R. Sallabanks, pers. comm.
N	Est. 9,300 breed	ing pop.	9,300			D. Cas ey, pers. comm.
W	Zero		0			R. Friesz, pers. comm.
	Est. 50 breeding	pop.	50			A. Cerovski, pers. comm.
California Gull (b)				14,234	3	
	Est. 5,000 breed	ing pop.	5,000			R. Sallabanks, pers. comm.
N	Est. 920 breedin	g pop.	920			D. Cas ey, pers. comm.
W	Zero		0			R. Friesz, pers. comm.
W	Est. 8,314 breed	ing pop.	8,314			A. Cerov ski, pers. comm.
Herring Gull (m)	insufficient da ta			unknowr	1	
Bonaparte s Gull (m)	insufficient da ta			unknowr	1	
Franklin s Gull (b)				19,000	3	
	Bear Lake NWR	>5,000 breeding pop.	5,000			S. Bouffard, pers. comm.
	Grays Lake NW	R >10,000 breeding pop.	10,000			S. Bouffard, pers. comm.
N	Est. 4,000 breed	ing pop.	4,000			D. Cas ey, pers. comm.
Cas pian Tern (b)				154	3	
N	Est. 54 breeding	pop.	54			D. Cas ey, pers. comm.
10	Zero		0			R. Friesz, pers. comm.
W			100			
W	Est. 100 breeding	g pop.	100			A. Cerovski, pers. comm.
Forster s Tern (b)				175	2	
N	Est. 125 breedin	g pop.	125			D. Cas ey, pers. comm.
W	A Zero		0			R. Friesz, pers. comm.
v	Est. 50 breeding	pop.	50			A. Cerov ski, pers. comm.
Black T ern (b)				574	3	
	S. ID 1993:12 r	ests	24	- 7 .		Trost and Gerstell 1994
N	Γ Est. 200 breedin	g pop.	200			D. Cas ey, pers. comm.
	Est. 250 breedin		250			R. Friesz, pers. comm.
	Est. 100 breedir		100			A. Cerov ski, pers. comm.
Pied-bille d Greb e (b)	insufficient da ta	-		unknowi	1	

Red-nec ked G rebe (b)			420	2	
ID	Henry s Lake: 10 pairs	20			C. Moulton, pers. comm.
WA	Est. 200-400 breeding pop.	400			R. Friesz, pers. comm.
Horned Grebe (b)	insufficient da ta		unknown	1	

Table 4. Population estimates and data quality of waterbird species in Bird Conservation Region 10 (cont.) (b = breeding, m = migrant).

Species	Population data	Site estimate	Total pop.	Data quality	Source
Eared G rebe (b)			1,912	3	
ID	S. ID 1993: 40 nests	80			Trost and Gerstell 1994
MT	Est. 700 breeding pop.	700			D. Cas ey, pers. comm.
WA	Est. 200 breeding pop.	200			R. Friesz, pers. comm.
WY	Est. 932 breeding pop.	932			A. Cerov ski, pers. comm.
Western Grebe (b)			740	3	
ID	S. ID 1993: 30 nests	60			Trost and Gerstell 1994
MT	Est. 250 breeding pop.	250			D. Cas ey, pers. comm.
WA	Zero	0			R. Friesz, pers. comm.
WY	Est. 430 breeding pop.	430			A. Cerov ski, pers. comm.
Clark s Grebe (b)			105	3	
MT	Est. 25 breeding pop.	25			D. Cas ey, pers. comm.
WA	Zero	0			R. Friesz, pers. comm.
WY	Est. 80 breeding pop.	80			A. Cerov ski, pers. comm.
Doub le-cres ted Cormorant (b)			1,976	3	
ID	S. ID 1993: 35 nests	70			Trost and Gerstell 1994
MT	Est. 1,150 breeding pop.	1,150			D. Cas ey, pers. comm.
WA	Est. >1 00 nests	200			S. Zender, pers. comm.
WY	Est. 556 breeding pop.	556			A. Cerov ski, pers. comm.
Snowy Egret (b)			70	3	
ID	S. ID 1993: 20 nests	40			Trost and Gerstell 1994
MT	Zero	0			D. Cas ey, pers. comm.
WA	Zero	0			R. Friesz, pers. comm.
WY	Est. 30 breeding pop.	30			A. Cerov ski, pers. comm.
Great B lue Hero n (b)			1,400	2	
ID	S. ID 1993: 85 nests	170			Trost and Gerstell 1994
MT	Est. 900 breeding pop.	900			D. Cas ey, pers. comm.
WA	Est. 165 nests	330			R. Freisz, pers. comm.
Cattle Egret (b)			220	3	
ID	S. ID 1993: 10 nests	20			Trost and Gerstell 1994
MT	Zero	0			D. Cas ey, pers. comm.
WY	Est. 200	200			A. Cerovski, pers. comm.
Black-crowned Night-Heron (b)			520	2	
ID	S. ID 1993: 35 nests	70			Trost and Gerstell 1994
MT	Est. 50 breeding pop.	50			D. Cas ey, pers. comm.
WA	Zero	0			R. Friesz, pers. comm.
WY	Est. 400 breeding pop.	400			A. Cerovski, pers. comm.
American Bittern (b)	insufficient da ta		unknown	1	
White-faced Ibis (b)			5,080	4	

ID	1997-99 avg.: 2,396 nests	4,792		Ivey et al. 2004
MT	Est. 20 breeding pop.	20		D. Cas ey, pers. comm.
WY	Est. 268 breeding pop.	268		A. Cerov ski, pers. comm.

Table 4. Population estimates and data quality of waterbird species in Bird Conservation Region 10 (cont.) (b = breeding, m = migrant).

Species	Population data	Site	Total	Data	Source
		estimate	pop.	quality	
American White Pelican (b)			10,500	4	
МТ	Est. 8,000 breeding pop.	8,000			D. Cas ey, pers. comm.
WA	Zero	0			R. Friesz, pers. comm.
WY	Est. 2,500 breeding pop.	2,500			A. Cerov ski, pers. comm.
Common Loon(b)			256	5	
II	Breeds	unknown			Idaho PF 2000
МТ	Est. 200 breeding pop.	200			D. Cas ey, pers. comm.
WA	3 nests	6			Richardson et al. 2000
WY	Est. 50 breeding pop.	50			A. Cerov ski, pers. comm.
Common Loon (m)	insufficient da ta		unknown	1	

Table 5. Population estimates and data quality of waterbird species in Bird Conservation Region 15 (b = breeding, m = migrant).

Species	Population data	Site	Total	Data	Source
		estimate	pop.	quality	
Greater Sandhill Crane (CVP) (b)	2000 survey		168	5	Ivey and Herziger 2000
Lesser Sandhill Crane (PFP) (m)	insufficient data		unknown	1	status unknown
Virginia Rail(b)	insufficient data		unknown	1	
Sora (b)	insufficient data		unknown	1	
American Coot (b)	insufficient da ta		unknown	1	
Ring-billed Gull (b)	Occasionally nest Lake Almanor		unknown	1	
California Gull (b)	Occasionally nest Lake Almanor		unknown	1	
Bonaparte s Gull (m)	insufficient da ta		unknown	1	
Caspian Tern (m)	insufficient da ta		unknown	1	
Forster s Tern (b)			76	4	Shuford 1998
	Mountain Meadows Res. 1997: 38 pairs	76			
Black Tern (b)	1997: 91 pairs		182	4	Shuford 1998
Pied-billed Grebe (b)	insufficient data		unknown	1	
Eared Grebe (b)			600	2	
	Mounta in Mead ows Res. 1999: 300 nests	600			Cooper 2004
Western Grebe (b)			1,446	4	
	Bridgeport R eserv oir 2003: 80 nests	160			Ivey 2004
	Lake Almanor 200 2-03 av g.: 633 nests	1,266			Ivey 2004
	Mounta in Mead ows 20 03: 10 ne sts	20			Ivey 2004
Clark s Grebe (b)			12	4	
	Lake Almanor 2003: 12 adults	12			Ivey 2004
Double-crested Cormount (b)			42	4	
	Butt Valley Res. 1997: 21 nests	42			Shuford 1998
Snowy Egret (m)	insufficient da ta		unknown	1	
Great Blue Heron(b)	insufficient da ta		unknown	1	
Great Egret (b)	insufficient da ta		unknown	1	
Cattle Egret (m)	insufficient da ta		unknown	1	
Black-crowned Night-Heron (b)	insufficient da ta		unknown	1	
American Bittern (b)	insufficient da ta		unknown	1	
White-faced Ibis (b)	1997-99 avg.: 500 nests		1,000	4	Ivey et al. 2004
Common Loon (m)	insufficient da ta		unknown	1	

Table 6. Population estimates and data quality of waterbird species in Bird Conservation Region 16 (b = breeding, m = migrant).

Species		Population data	Site	Total	Data	Source
•		•	estimate	pop.	quality	
Greate r Sandhill Crane (RMP) (b)			300	3	
	СО	300	300			R. Levad, pers. comm.
	UT	unknown	unknown			
Greater Sandhill Crane (RMP) (n	1)			unknown	5	
	СО	Entire p op. stage s in C O	18,683			Sharp et al. 2002
	UT		2,400			Sharp et al. 2002
Sandhill Crane (MCP) (m)				unknown	4	-
	CO	Est. 6, 700	6,700			Sharp et al. 2002
	NM	Est. 12, 500	12,500			Sharp et al. 2002
Virginia Rail (b)		insufficient da ta		unknown	1	
Sora (b)		insufficient data		unknown	1	
Commo n Moorhen (b)				20		
Common Woornen (b)	NM	<10 pairs	20	20	1	B. Howe, pers. comm.
4	10 101		20			B. Howe, pers. comm.
American Coot (b)		insufficient da ta		unknown		
Ring-billed Gull (m)		insufficient da ta		unknown	1	
California Gull (b)				1,000	3	
	СО	500 nests	1,000			R. Levad, pers. comm.
Bonaparte s Gull (m)		insufficient da ta		unknown	1	
Franklin s Gull (b)				100	4	
Franklin's Guil (b)	00	Est 100 hosseline non	100	100	7	D. I 1
F (T (1)	CO	Est. 100 breeding pop.	100	(2	2	R. Levad, pers. comm.
Forster s Tern (b)				63	2	
		Est. 50 breeding pop.	50			R. Levad, pers. comm.
	UT	Ouray NWR 1990-99 avg.: 13 breed. pop.	13			USFWS data
Black T ern (b)				29	4	
	CO	0-20 nests; avg. 10 nests?	20			R. Levad, pers. comm.
	UT	Ouray NWR 1990-99 avg.: 9 breed. pop.	9			USFWS data
Pied-billed Grebe (b)				unknown	1	
	NM	<100?	100			B. Howe, pers. comm.
Eared G rebe (b)				6,704	3	
	ΑZ	Est. av g. 400 nes ts	800			T. Supplee, pers. comm.
	СО	Est. av g. 2,000 nes ts	4,000			R. Levad, pers. comm.
	NM	Stinking Lake 1993-97 a vg.: 950 nests	1,900			Stahlecker 1996, 1997
		Ouray NWR 1990-99 avg.: 4 breed. pop.	4			USFWS data
Wastana Casha (b)		l and a second s		202	2	
Western Grebe (b)		100	200	382	3	T. C. 1
		Est. av g. 100 nes ts	200			T. Supplee, pers. comm.
		Est. av g. 75 nests	150			R. Levad, pers. comm.
	UT	Ouray NWR 1990-99 avg.: 32 breed. pop.	32			USFWS data
Clark s Grebe (b)				210	3	
	ΑZ	Est. av g. 25 nests	50			T. Supplee, pers. comm.
	СО	Est. avg. 75 nests	150			R. Levad, pers. comm.
	NM	<5 nests	10			B. Howe, pers. comm.
Double-crested Cormount (b)				721	3	
	ΑZ	Est. av g. 65 pairs	130			T. Supplee, pers. comm.
		Est. 500 breeding pop.	500			R. Levad, pers. comm.
		Ouray NWR 1990-99 avg.: 91 breed. pop.	91			USFWS data
Little Blue He ron (b)	<i>J</i> 1	z z z z z z z z z z z z z z z z z z z	71	nulse or	2	
Lime Diae Heloli (b)	X13 *	11.2 mosts accomplished		unknowr	∠	D. H
	ΝM	1-2 nests, occas ionally	3			B. Howe, pers. comm.

Table 6. Population estimates and data quality of waterbird species in Bird Conservation Region 16 (cont.) (b=breeding, m=migrant).

Species		Population data	Site	Total	Data	Source
			estimate	pop.	quality	
Snowy Egret (b)				940	3	
	CO	Est. av g. 200 nes ts	400			R. Levad, pers. comm.
	NM	Est. av g. 250 nes ts	500			B. Howe, pers. comm.
	UT	Ouray NWR 1990-99 avg.: 40 breed. pop.	40			USFWS data
Great Blue Heron (b)				2,081	2	
	ΑZ	Est. av g. 75 nests	150			T. Supplee, pers. comm.
	СО	Est. 900 breeding pop.	900			R. Levad, pers. comm.
	NM	2001: 486 nests	972			B. Howe, pers. comm.
	UT	Ouray NWR 1990-99 avg.: 59 breed. pop.	59			USFWS data
Great Egret (m)		insufficient da ta		unknown	1	
Cattle Egret (b)				225	4	
	СО	Est. av g. 100 nes ts	200		ļ	R. Levad, pers. comm.
	NM	0-25 nests; avg. 25 breeding pop.	25			B. Howe, pers. comm.
Green Heron (b)				220	3	
	СО	>10 nests	20			R. Levad, pers. comm.
	NM	~ 100 nests?	200			B. Howe, pers. comm.
Black-c rowned N ight-Heron (b)				655	2	
	СО	Est. av g. 300 nes ts	600		ļ	R. Levad, pers. comm.
	NM	Stinking Lake 1990-97 a vg.: 20 nests	40			Stahlecker 1996, 1997
	UT	Ouray NWR 1990-99 avg.: 15 breed. pop.	15		ļ	USFWS data
Least Bittern (b)		insufficient da ta		unknown	1	
American Bittern (b)		insufficient da ta		unknown	1	
White-face d Ibis (b)				10,124	4	
	ΑZ	Zero	0			T. Supplee, pers. comm.
	СО	Est. av g. 5,000 nes ts	10,000			R. Levad, pers. comm.
	NM	Stinking Lake 1990-97 avg.: 14 nests	28			Stahlecker 1996, 1997
	UT	Ouray NWR 1997-99 avg.: 48 nests	96			Ivey et al. 2004
Americ an White Pe lican (b)				400	5	
	СО	Est. av g. 200 nes ts	400			R. Levad, pers. comm.
AZ, NM	1, UT	No b reed ing	0			
Common Loon (m)		insufficient da ta		unknown	1	

For those breeding waterbird species with a North American population estimate (Table 1), we combined all BCR populations for a total for the Intermountain West and derived a percentage of the North American population (Table 7). Species with over 25% of breeding populations using the Region were Greater Sandhill Crane (CVP), Greater Sandhill Crane (LCRVP), Greater Sandhill Crane (RMP), California Gull, White-faced Ibis, and American White Pelican.

Table 7. Total population estimates for selected waterbird species in the Intermountain West and percentage of North American population.

		#	#	Intermountain West
Greater Sandhill Crane (CVP) (b) N	Jorth America	8,000		,,
В	CR 9	3,777		
В	3CR 10	262		
В	3CR 15	168		
В	3CR 16	0		
II	ntermountain West total		4,207	52.6%
Greater Sandhill Crane (LCRVP) (b) N	Jorth America	2,000		
В	SCR 9	1,900		
В	3CR 10	100		
В	BCR 15	0		
В	3CR 16	0		
Iı	ntermountain West total		2,000	100.0%
Greater Sandhill Crane (RMP) (b)	North America	18,683		
В	BCR 9	1,868		
В	3CR 10	16,515		
В	BCR 15	0		
В	BCR 16	300		
	ntermountain West total		18,683	100.0%
· · ·	North America	1,700,000		
В	BCR 9	71,462		
В	BCR 10	19,350		
В	BCR 15	unknown		
В	BCR 16	unknown		
	ntermountain West total		90,812	5.3%
California Gull (b)	North America	414,000		
В	BCR 9	308,062		
В	BCR 10	14,234		
В	BCR 15	unknown		
В	BCR 16	1,000		
Iı	ntermountain West total		323,296	78.1%
Franklin s Gull (b)	North America	653,236		
В	BCR 9	42,076		
В	BCR 10	19,000		
В	3CR 15	0		
В	3CR 16	100		
In	ntermountain West total		61,076	9.3%

Table 7. Total population estimates for selected waterbird species in the Intermountain West and percentage of global population (cont.).

BC BC BC Int	orth America BCR 9 CR 10 CR 15 CR 16 atermountain West total orth America CR 9 CR 10 CR 15 CR 16 atermountain West total orth America CR 9 CR 10 CR 15 CR 16 atermountain West total orth America CR 9 CR 10	68,000 2,310 154 0 0 49,500 7,299 175 76 63	2,464 7,613	3.6%
BC BC Int	CR 10 CR 15 CR 16 Intermountain West total orth America CR 9 CR 10 CR 15 CR 16 Intermountain West total orth America CR 9	154 0 0 49,500 7,299 175 76 63		
BC BC Int	CR 15 CR 16 atermountain West total orth America CR 9 CR 10 CR 15 CR 16 atermountain West total orth America CR 9	49,500 7,299 175 76 63		
BC Int	CR 16 ntermountain West total orth America CR 9 CR 10 CR 15 CR 16 ntermountain West total orth America CR 9	49,500 7,299 175 76 63		
Int Forster's Tern (b) No BC BC BC BC Int Black Tern (b) No No BC Tern (b) No BC BC BC BC BC BC BC B	orth America CR 9 CR 10 CR 15 CR 16 attermountain West total orth America CR 9	49,500 7,299 175 76 63		
Forster's Tern (b) BG BG BG Int Black Tern (b)	orth America CR 9 CR 10 CR 15 CR 16 attermountain West total orth America CR 9	7,299 175 76 63		
BC BC BC Int Black Tern (b)	CR 9 CR 10 CR 15 CR 16 atermountain West total orth America CR 9	7,299 175 76 63	7,613	15.4%
Black Tern (b)	CR 10 CR 15 CR 16 ntermountain West total orth America CR 9	175 76 63 300,000	7,613	15.4%
Black Tern (b)	CR 15 CR 16 atermountain West total orth America CR 9	76 63 300,000	7,613	15.4%
Black Tern (b)	CR 16 Intermountain West total Orth America CR 9	300,000	7,613	15.4%
Black Tern (b) No	ntermountain West total forth America CR 9	300,000	7,613	15.4%
Black Tern (b) No	orth America CR 9		7,613	15.4%
<u>.</u>	CR 9			
i n		5,916		
BC	CR 10			
ВС		574		
ВС	CR 15	182		
ВС	CR 16	29		
Int	ntermountain West total		6,701	2.2%
Eared Grebe (b) No	orth America	3,800,000		
ВС	CR 9	29,375		
ВС	CR 10	1,912		
ВС	CR 15	600		
ВС	CR 16	6,704		
Int	ntermountain West total		38,591	1.0%
Western Grebe (b)	orth America	110,000		
ВС	CR 9	9,758		
ВС	CR 10	740		
В	CR 15	1,446		
ВС	CR 16	382		
In	ntermountain West total		12,326	11.2%
Clark s Grebe (b)	Iorth America	15,000		
ВС	CR 9	2,440		
В	CR 10	105		
<u>Į</u>	3CR 15	12		
<u></u>	3CR 16	210		
	ntermountain West total		2,767	18.4%
	Jorth America	740,000	2,707	10.770
	SCR 9	10,502		
!	BCR 10	1,976		
ļ ļ	3CR 15	42		
	BCR 16	721		
Į.	ntermountian West total	, 21	13,241	1.8%

Table 7. Total population estimates for selected waterbird species in the Intermountain West and percentage of global population (cont.).

Species	Area	Estimated #	Intermountain West #	Intermountain West
Snowy Egret (b)	North America	143,000		
	BCR 9	3,071		
	BCR 10	70		
	BCR 15	0		
	BCR 16	940		
	Intermountain West total		4,081	2.9%
Great Blue Heron(b)	North America	83,000		
	BCR 9	4,432		
	BCR 10	1,400		
	BCR 15	unknown		
	BCR 16	2,081		
	Intermountain West total		7,913	9.5%
Great Egret(b)	North America	180,000		_
	BCR 9	2,258		
	BCR 10	0		
	BCR 15	0		
	BCR 16	0		
	Intermountain West total		2,258	1.3%
Black-crowned Night-Heron (b)	North America	50,000		
	BCR 9	5,480		
	BCR 10	520		
	BCR 15	unknown		
	BCR 16	655		
	Intermountain West total		6,655	13.3%
White-faced Ibis (b)	North America	100,000		
	BCR 9	54,168	<u> </u>	
	BCR 10	5,080		
	BCR 15	1,000		
	BCR 16	10,124		
	Intermountain West total		70,372	70.4%
American White Pelican (b)	North America	120,000		
	BCR 9	32,441		
	BCR 10	10,500		
	BCR 15 BCR 16	400		
	Intermountain West total	400	43,341	36.1%
	incimountain west total		43,341	30.176

Area Importance scores. Species abundance within a BCR was used to either demote a marginally-occurring species from the national ranking (Table 1), or to promote it if its presence in the BCR is important to the overall persistence of the species. Based on the population estimates from Tables 3-6 above, AI scores are provided in Tables 8, 9, 10 and 11. For migrant species and breeding species with unknown numbers, scores were assigned based on professional judgement on the importance of the entire BCR.

Table 8. Area Importance (AI) scores¹ for waterbirds in Bird Conservation Region 9 (b = breeding, m = migrant).

Species	North	Source	Estimated #	% in BCR	ΑI	Comments
~ p****	American	204100	in BCR	, , , , , , , , , , , , , , , , , , , ,	score	
	estimate					
Greater Sandhill Crane (CVP) (b)	8,000	Hoffman 2000	3,777	47.2%	4	
Greater Sandhill Crane (CVP) (m)	8,000	Hoffman 2000	unknown	unknown	5	entire pop.
Greater Sandhill Crane (LCRVP) (b)	2,000	Pacific Flyway Council 1995	1,900	95.0%	5	almost entire pop.
Greater Sandhill Crane (LCRVP) (m)	2,000	Pacific Flyway Council 1995	unknown	unknown	5	estimate
Greater Sandhill Crane (RMP) (b)	18,683	Sharp et al. 2002	1,868	10.0%	3	
Lesser Sandhill Crane (PCP) (m)	25,000	Pacific Flyway Council 1983	unknown	unknown	5	entire pop.
Yellow Rail (b)	unknown		520	unknown	5	entire westem pop?
Virginia Rail(b)	unknown		unknown	unknown	3	estimate
Sora (b)	unknown		unknown	unknown	3	estimate
Common Moorhen(b)	unknown		unknown	unknown	1	estimate
American Coot (b)	2,000,000	Kushlan et al. 2002	unknown	unknown	3	estimate
Ring-billed Gull (b)	1,700,000	Kushlan et al. 2002	71,462	4.2%	2	
California Gull (b)	414,000	Kushlan et al. 2002	308,062	74.4%	5	
Glaucous-winged Gull (b)	380,000	Kushlan et al. 2002	unknown	<1.0%	1	
Herring Gull (m)	246,000	Kushlan et al. 2002	unknown	unknown	1	estimate
Bonaparte s Gull (m)	unknown	Kushlan et al. 2002	unknown	unknown	1	estimate
Franklin s Gull (b)	653,236	Kushlan et al. 2002	42,076	6.4%	2	
Caspian Tern (b)	68,000	Kushlan et al. 2002	2,310	3.4%	2	
Common Tern (b)	300,000	Kushlan et al. 2002	unknown	<1.0%	1	estimate
Forster s Tern (b)	49,500	Kushlan et al. 2002	7,299	14.7%	3	
Black Tern (b)	300,000	Kushlan et al. 2002	5,916	2.0%	2	
Pied-billed Grebe (b)	unknown		unknown	unknown	3	estimate
Red-necked Grebe (b)	unknown		28	<1.0%	1	estimate
Horned Grebe (b)	unknown		unknown	unknown	2	estimate
Eared Grebe (b)	3,800,000	Kushlan et al. 2002	29,375	0.8%	1	
Eared Grebe (m)	3,800,000	Kushlan et al. 2002	unknown	unknown	5	may be up to 98%
Western Grebe (b)	110,000	Kushlan et al. 2002	9,758	8.9%	2	
Clark s Grebe (b)	15,000	Kushlan et al. 2002	2,440	16.3%	3	
Double-crested Cormount (b)	740,000	Kushlan et al. 2002	10,502	1.4%	2	
Snowy Egret (b)	143,000	Kushlan et al. 2002	3,071	2.1%	2	
Great Blue Heron(b)	83,000	Kushlan et al. 2002	4,432	5.3%	2	
Great Egret(b)	180,000	Kushlan et al. 2002	2,258	1.3%	2	
Cattle Egret (b)	unknowr		922	<1.0%	1	estimate
Green Heron (b)	unknowr		unknown	unknown	1	estimate
Black-crowned Night-Heron (b)	50,000	Kushlan et al. 2002	5,480	11.0%	3	
Least Bittern (b)	unknowr		unknown	unknown	1	estimate
American Bittern (b)	unknowr		unknown	unknown	3	estimate
White-faced Ibis (b)	100,000	Kushlan et al. 2002	54,168	54.2%	5	
American White Pelican (b)	120,000	Kushlan et al. 2002	32,441	27.0%	4	
American White Pelican (m)	120,000	Kushlan et al. 2002	unknown	unknown	4	estimate
Common Loon(b)	unknowr		8	unknown	1	estimate
Common Loon (m)	unknowr		unknown	unknown	2	estimate

¹ Based on percentage of population occurrence in a given BCR: >50%=5,25-49%=4, 10-24%=3,1-9%=2, <1%=1.

Table 9. Area Importance (AI) scores¹ for waterbirds in Bird Conservation Region 10 (b = breeding, m = migrant).

Species	North Americ an	Source	Estimated # in BCR	% in BCR	AI score	Comments
	estimate		швек		SCOTE	
Greater Sandhill Crane (CVP) (b)	8,000	Hoffman 2000	262	3.3%	2	
Greater Sandhill Crane (LCRVP) (b)	2,000	Pacific Flyway Council 1995	100	5.0%	2	
Greater Sandhill Crane (RMP) (b)	18,683	Sharp et al. 2002	16,515	88.4%	5	
Virginia Rail(b)	unknown		unknown	unknown	2	estimate
Sora (b)	unknown		unknown	unknown	2	estimate
American Coot (b)	2,000,000	Kushlan et al. 2002	unknown	1.0%	2	estimate
Ring-billed Gull (b)	1,700,000	Kushlan et al. 2002	19,350	1.1%	2	
California Gull (b)	414,000	Kushlan et al. 2002	14,234	3.4%	2	
Herring Gull (m)	246,000	Kushlan et al. 2002	unknown	unknown	1	estimate
Bonaparte s Gull (m)	unknown	Kushlan et al. 2002	unknown	unknown	1	estimate
Franklin s Gull (b)	653,236	Kushlan et al. 2002	19,000	2.9%	2	
Caspian Tern (b)	68,000	Kushlan et al. 2002	154	<1.0%	1	
Forster s Tern (b)	49,500	Kushlan et al. 2002	175	<1.0%	1	
Black Tern (b)	300,000	Kushlan et al. 2002	574	<1.0%	1	
Pied-billed Grebe (b)	unknown		unknown	unknown	2	estimate
Red-necked Grebe (b)	unknown		420	unknown	2	estimate
Horned Grebe (b)	unknown		unknown	unknown	2	estimate
Eared Grebe (b)	3,800,000	Kushlan et al. 2002	1,912	<1.0%	1	
Western Grebe (b)	110,000	Kushlan et al. 2002	740	0.7%	1	
Clark s Grebe (b)	15,000	Kushlan et al. 2002	105	0.7%	1	
Double-crested Cormount (b)	740,000	Kushlan et al. 2002	1,976	<1.0%	1	
Snowy Egret (b)	143,000	Kushlan et al. 2002	70	<1.0%	1	
Great Blue Heron(b)	83,000	Kushlan et al. 2002	1,400	1.7%	2	
Cattle Egret (b)	unknowr	Kushlan et al. 2002	220	<1.0%	1	
Black-crowned Night-Heron (b)	50,000	Kushlan et al. 2002	520	1.0%	2	
American Bittern (b)	unknowr		unknown	unknown	. 2	estimate
White-faced Ibis (b)	100,000	Kushlan et al. 2002	5,080	5.1%	2	
American White Pelican (b)	120,000	Kushlan et al. 2002	10,500	8.8%	2	
Common Loon(b)	unknowr		256	unknown	2	estimate
Common Loon (m)	unknowr		unknown	unknown	2	estimate

¹ Based on percentage of population occurrence in a given BCR: >50%=5, 25-49%=4, 10-24%=3, 1-9%=2, <1=1.

Table 10. Area Importance (AI) scores¹ for waterbirds in Bird Conservation Region 15 (b = breeding, m =migrant).

Species	North American estimate	Source	Estimated # in BCR	% in BCR	AI score	Comments
Greater Sandhill Crane (CVP) (b)	8,000	Hoffman 2000	168	2.1%	2	
Lesser Sandhill Crane (PCP) (m)	25,000	Pacific Flyway Council 1983	unknown	unknown	?	unknown status
Virginia Rail(b)	unknown		unknown	unknown	1	estimate
Sora (b)	unknown		unknown	unknown	1	estimate
American Coot (b)	2,000,000	Kushlan et al. 2002	unknown	<1.0%	1	estimate
Ring-billed Gull (b)	1,700,000	Kushlan et al. 2002	unknown	<1.0%	1	estimate
California Gull (b)	414,000	Kushlan et al. 2002	unknown	<1.0%	1	estimate
Bonaparte s Gull (m)	unknown	Kushlan et al. 2002	unknown	unknown	1	estimate
Caspian T ern (m)	68,000	Kushlan et al. 2002	unknown	unknown	1	estimate
Forster s Tern (b)	49,500	Kushlan et al. 2002	76	0.2%	1	
Black Tern (b)	300,000	Kushlan et al. 2002	182	0.1%	1	
Pied-billed Grebe (b)	unknown		unknown	unknown	1	estimate
Eared Grebe (b)	3,800,000	Kushlan et al. 2002	600	<1.0%	1	
Western Grebe (b)	110,000	Kushlan et al. 2002	1,446	1.3%	2	
Clark s Grebe (b)	15,000	Kushlan et al. 2002	12	0.1%	1	
Double-crested Cormorant (b)	740,000	Kushlan et al. 2002	42	<1.0%	1	
Snowy Egret (m)	143,000	Kushlan et al. 2002	unknown	unknown	1	estimate
Great Blue Heron(b)	83,000	Kushlan et al. 2002	unknown	<1.0%	1	estimate
Great Egret(b)	180,000	Kushlan et al. 2002	unknown	<1.0%	1	estimate
Cattle Egret (m)	unkno wn		unknown	unknown	1	estimate
Black-crowned Night-Heron (b)	50,000	Kushlan et al. 2002	unknown	<1.0%	1	estimate
American Bittern (b)	unknown		unknown	unknown	1	estimate
White-faced Ibis (b)	100,000	Kushlan et al. 2002	1,000	1.0%	2	
Common Loon (m)	unknown		unknown	unknown	1	estimate

¹ Based on percentage of population occurrence in a given BCR: >50%=5,25-49%=4, 10-24%=3,1-9%=2, <1=1.

Table 11. Area Importance (AI) scores¹ for waterbirds in Bird Conservation Region 16 (b = breeding, m =migrant).

Species	North American	Source	Estimated # in BCR	% in BCR	AI score	Comments
	estimate					
Greater Sandhill Crane (RMP) (b)	18,683	Sharp et al. 2002	300	1.6%	2	
Greater Sandhill Crane (RMP) (m)	18,683	Sharp et al. 2002	unknown	unknown	5	entire pop.?
Sandhill Crane (MCP) (m)	464,000	Sharp et al. 2002	unknown	unknown	2	estimate
Virginia Rail(b)	unknown		unknown	unknown	1	estimate
Sora (b)	unknown		unknown	unknown	1	estimate
Common Moorhen (b)	unknown		20	unknown	1	estimate
American Coot (b)	2,000,000	Kushlan et al. 2002	unknown	<1.0%	1	estimate
Ring-billed Gull (m)	1,700,000	Kushlan et al. 2002	unknown	unknown	1	estimate
California Gull (b)	414,000	Kushlan et al. 2002	1,000	<1.0%	1	
Bonaparte s Gull (m)	unkno wn	Kushlan et al. 2002	unknown	unknown	1	estimate
Franklin s Gull (b)	653,236	Kushlan et al. 2002	100	<1.0%	1	
Forster s Tern (b)	49,500	Kushlan et al. 2002	63	0.1%	1	
Black Tern (b)	300,000	Kushlan et al. 2002	29	<1.0%	1	
Pied-billed Grebe (b)	unknown		unknown	unknown	1	estimate
Eared Grebe (b)	3,800,000	Kushlan et al. 2002	6,704	0.2%	1	
Western Grebe (b)	110,000	Kushlan et al. 2002	382	0.3%	1	
Clark s Grebe (b)	15,000	Kushlan et al. 2002	210	1.4%	2	
Double-crested Cormount (b)	740,000	Kushlan et al. 2002	721	0.1%	1	
Little Blue Heron(b)	unknown	Kushlan et al. 2002	unknown	<1.0%	1	estimate
Snowy Egret (b)	143,000	Kushlan et al. 2002	940	0.7%	1	
Great Blue Heron(b)	83,000	Kushlan et al. 2002	2,081	2.5%	2	
Great Egret (m)	180,000	Kushlan et al. 2002	unknown	unknown	1	estimate
Cattle Egret (b)	unknown	Kushlan et al. 2002	225	unknown	1	estimate
Green Heron (b)	unknown	Kushlan et al. 2002	220	unknown	1	estimate
Black-crowned Night-Heron (b)	50,000	Kushlan et al. 2002	655	1.3%	2	
Least Bittern (b)	unknown		unknown	unknown	1	estimate
American Bittern (b)	unknown		unknown	unknown	1	estimate
White-faced Ibis (b)	100,000	Kushlan et al. 2002	10,124	10.1%	3	
American White Pelican (b)	120,000	Kushlan et al. 2002	400	0.3%	1	
Common Loon (m)	unknown		unknown	unknown	1	estimate

¹ Based on percentage of population occurrence in a given BCR: >50%=5, 25-49%=4, 10-24%=3, 1-9%=2, <1=1.

Review of species regional status. Some waterbird species are on lists of USFWS Birds of Conservation Concern (BCC), state Threatened and Endangered (T&E) or Species of Concern (SC), or are focal species in state and regional Partners in Flight Bird Conservation Plans and Physiographic Area Plans (http://www.blm.gov/wildlife/pifplans.htm) (Table 12). These listings are also used to help designate priority rankings for waterbird species.

Table 12. Intermountain West waterbird species on lists of USFWS Birds of Conservation Concern (BCC), state Endangered (SE), Threatened (ST), or Sensitive Species/Species of Concern (SC) ¹; or focal or priority species (F) in Partners in Flight (PIF) state Bird Conservation Plans and Physiographic Area Plans ², by Bird Conservation Region (BCR). Species status is included only if it is known to occur in a given BCR.

Species ³	BCR 9	BCR 10	BCR 15 ⁴	BCR 16
Greater Sandhill Crane (CVP)	SE: WA ⁵ ST: CA SC: OR F: NV, Columbia Plateau ⁵	SC: OR	ST: CA	
Greater Sandhill Crane (LCRVP)	F: ID ⁵ , NV	F: ID ⁵		
Greater Sandhill Crane (RMP)	F: ID ⁵	F: ID 5		SC: CO ⁵
Lesser Sandhill Crane (PFP)	SE: WA ⁵ SC: CA			
Yellow Rail	BCC: National, USFWS Reg. 1 SC: OR			
Ring-billed Gull	F: ID	F: ID		
California Gull	F: ID	F: ID		
Franklin s Gull	SC: OR F: ID, Basin & Range, Columbia Plateau	SC: MT F: ID, MT, Central Rocky Mountains		
Ca spia n Tern	F: ID	SC: MT, WY F: MT		
Forster s Tern	F: ID	SC: MT, WY F: MT, WY		
Black Tern	SC: CA, ID F: ID, NV	SC: ID, MT, WY F: ID, MT, WY	SC3: CA	
Red-næked Grebe	SC: OR	F: ID		
Horned Grebe	SC: OR	SC: OR F: MT		
Eared Grebe	F: ID	F: ID		
Western Grebe	SC: WA F: ID, Columb ia Plateau	F: ID		
Clark s Grebe	F: ID, NV	SC: WY F: MT		SC: AZ F: NM
Snowy Egret	SC: OR F: ID	F: ID		SC: AZ
Great Egret	SC: ID			SE: AZ
Black-crowned Night-Heron		SC: MT F: MT		
Least Bittern	SC: CA, OR			SC: AZ
Ame rican B ittern	F: ID	SC: WY F: ID, MT, WY		SC: AZ F: AZ, NM
White-faced Ibis	F: ID, NV	SC: MT, WY F: ID, MT		F: NM
American White Pelican	SE: WA SC: CA, ID, OR, UT F: ID, NV, UT, Basin & Range	SC: MT, WY F: MT, Central Rocky Mountains, Wyoming Ba sin		SC: UT F: UT
Common Loon	SC: CA, D, WA	SC: ID, MT, WA, WY F: MT	SCe: CA	E M 4

¹ For Washington Species of Concern, species listed as SM (State Monitor) were not included in this table. For Montana, those listed as Species on Review were not included.

² Latta et al. 1999, Idaho PIF 2000, Montana PIF 2000, Neel 1999, Nich oloff 2003, Rustay 2000, and Parrish et al. 2002.

³ No species of concern lists for NV or NM, and CA list is in review, so adjustments may be needed after final list is sanctioned. No waterbirds were listed in PIF plans for California, Colorado, Oregon/Washington, or the Sierra Nevada, Colorado Plateau, Utah Mountains or Southern Rocky Mountains Physiographic Area plans.

⁴ Draft California Bird Species of Concern List (PRBO 2003) priorities used for ranking in this BCR since only one state.

⁵ Status does not specify subspecies of Sandhill Crane.

Concern Matrix. The planning team for NAWCP developed a Concern Matrix which illustrates the continental concern categories for all colonial-nesting species, as well as the relative responsibility that North America has for their conservation, based on their global distribution (Table 13). For example, a species that is ranked as Highly Imperiled and breeds and winters only in North America falls in the upper, left-hand corner of the matrix. Conservation efforts should be focused on these species, as they are among the most vulnerable to further decline, and for which North American managers have the greatest responsibility. A species that is ranked as Not at Risk and occurs only peripherally within North America with a much larger distribution elsewhere will fall in the lower, right-hand corner of the matrix. Regional Working Groups are challenged with identifying local priorities for species occurring within their region, and with adjusting the continental-scale information to reflect them in the regional plans.

Concern ratings for Intermountain West species fall into four categories: High, Moderate, Low and Not at Risk; we have no Highly Imperiled species. For NAWCP, High Concern species are thought to be declining and have some other known or potential threat as well; Moderate Concern species are thought to be declining with moderate threats or distributions, stable with known or potential threats and moderate to restricted distributions, or relatively small with relative restricted distributions; Low Concern species are thought to be stable with moderate threats and distributions, increasing but with known or potential threats and moderate to restricted distributions or moderate size with known or potential threats and moderate to restricted distributions; and Not at Risk are all other species for which information was available. The rankings used in this Plan were modified based on regional concern rankings (see next section). It was recommended that as a first step regional planners disregard any species occurring only peripherally in their BCR. Species in parenthesis were removed from consideration because they only occur in the Region in very low numbers, so it would not make sense to specifically manage for them.

Table 13. Concern matrix developed by the national planning team for colonial waterbirds found in the Intermountain West Region.

		Globa	al Distribution		
Continental Concern Category	North America	Western Hemisphere	Northern Hemisphere	Cosmopolitan	Perip heral
Highly Imperiled					
High		Little Blue Heron Snowy Egret			
Moderate	American White Pelican Ca lifornia Gu ll Fors ter s Tern Western Grebe	Bonaparte s Gull Franklin s Gull (Neotro pic C ormorant)	(T hay er s G ull)	Black-crowned Night-Heron Black Tern Eared Grebe	
Low	Clark s Grebe Green Heron	Wh ite- fac ed Ib is	Gla uc ou s- wing ed Gu ll	Casp ian Tern Com mon T ern Her ring Gu ll	
Not at Risk	Double-crested Cormo rant Rin g-b illed Gu ll	Great Blue Heron		Cattle Egret Great Egret (Me w G ull)	

¹Global distribution categories were broadly defined as:

North America: Includes species that breed and winter only in North America and associated oceanic regions.

Western Hemisphere: Includes species that breed and winter in North and South America and associated oceanic regions.

Northern Hemisphere: Includes all species, except those included in the above categories, that breed and winter in the Northern Hemisphere and associated oceanic regions.

Cosmopolitan: Includes all species that breed and winter in most hemispheres including North America and associated oceanic regions

Peripheral: Includes all species that occur largely outside of North America but with breeding and/or non-breeding ranges that overlap peripherally with North America and associated oceanic regions.

Develop Regional Concern Rankings. National rankings of colonial waterbird species were adjusted to regional criteria and concerns. In addition, marshbirds were added to the concern matrix. We developed the following criteria for regional waterbird rankings:

- " Colonial species were promoted one concern category if AI score = 5, and demoted one category if AI score = 1.
- " Colonial species were promoted one concern category if they were on more than one state SC list or Focal on regional PIF plan lists, or USFWS BCC lists, but not above Moderate Concern unless they were on three or more SC or Focal species lists. All colonial species on state T&E lists were ranked High Concern.
- " All migrant species were dropped to Not At Risk except priority species (e.g., Lesser Sandhill Crane (PFP), Eared Grebe, and American White Pelican in BCR 9; Common Loon in BCR 15; and Greater Sandhill Crane (RMP) in BCR 16.
- " Marshbirds were listed as High Concern if they appeared on a state T&E list or USFWS BCC list
- " Marshbirds were listed as Moderate Concern if they appeared on more than one state SC list or

as a PIF plan focal species.

- " Marshbirds were listed as Low Concern if they appeared on only one state SC list or a PIF plan focal species.
- "Since BCR 15 falls within one state only (California), different rules were used. The draft Bird Species of Concern List (Point Reyes Bird Observatory 2003) has three priority categories. For colonial species, rankings were elevated if they were on the state s SC list or demoted if they were only migrant or AI = 1. Marshbirds in the first priority or extirpated list were placed in the High Concern category, birds in the second priority list in the Moderate Concern category, and those in the third priority list in the Low Concern category (some birds may be dropped from the list when it is finalized). Species on the state s T&E list were also included as High Concern.
- " Species which we identified as needing additional conservation priority because of regional risks were also promoted in rankings.
- " Only species known to occur in each BCR are listed in the concern matrices (Tables 14, 15, 16, and 17).

Table 14. Concern Matrix for waterbirds in Bird Conservation Region 9 (breeding species unless noted as migrant or both breeder and migrant; b = breeding, m = migrant).¹

	GLOBAL DISTRIBUTION						
Concern Category	North America	Western Hemisphere	Northern Hemisphere	Cosmopolitan	Perip heral		
High Concern	Greater Sandhil Crane (CVP) (b, m) Greater Sandhil Crane (LCRVP) (b) Yello w R ail Western Grebe Clark s Grebe American White Pelican (b, m)	Frank lin s G ull Snowy Egret White-fac ed Ib is	Lesser Sand hillCrane (PFP) (m) Common Loon (b, m)	Black Tern Eared Grebe (m)			
Moderate Concern	Greater Sandhil Crane (LCRVP) (m) Greater Sandhil Crane (RMP) California Gull Forster s Tern	Great Blue Heron Least Bittern		Black-crowned Night-Heron			
Low Concern	American Bittern		Red-nec ked Greb e Horned Grebe	Casp ian Tern Eared Grebe (b)	Com mon T ern		
Not at Risk	Sora American Coot Ring-b illed Gull Bonaparte s Gull (m) Green Hewn Double-crested Cormo rant	Virg inia R ail Comm on Moorhen Pied-billed Grebe	Gla uc ou s- wing ed Gu ll	Great Egret Cattle Egret	Herring Gull(m)		

¹Changes in rankings for colonial species:

- " California Gull: because of healthy populations, lack of threats, and increasing trend, kept at Moderate.
- " Glaucous-win ged Gull to Not at Risk because AI = 1.
- " Herring Gull and Bonaparte's Gull to Not at Risk because migrant, Herring Gull also to Peripheral because of rarity.
- " Franklin's Gull to High because SC in OR and Focal in ID and two PIF plans.
- " Common Tem to Peripheral because of rarity.
- " Black Tern to High because SC in ID and on Draft CA SC list, and Focal in ID and NV.
- " Eared Grebe (breeding) to Low because AI = 1.
- " Eared Grebe (migrant) to High because AI = 5.
- " Western Grebe to High because SC in WA, and Focal in ID and Columbia Plateau PIF plan, and threats (disturbance, water levels).
- " Clark s Grebe to High because Focal in ID and NV and threats (disturbance, water levels).
- " Great Blue Heron to Moderate because of moderate threat of potential loss of riparian forests.
- " Green Heron to Not at Risk because AI = 1.
- " White-fa ced Ib is to High b ecause Focal in ID and NV and AI = 5.
- " American White Pelican (breeding) to High because SE in WA; SC in ID, OR, UT, and on Draft CA SC list; and Focal in ID, NV, UT, and Basin and Range PIF plan.
- " American White Pelican (migrant) to high because SC in UT and AI = 4.

Rankings for marshbirds:

- " Great er Sandh ill Cran e (CVP) (breeding) to High because SE in WA, ST in CA, SC in OR, Fo cal in NV and Columbia Plateau PIF plan, and AI = 4. Same listings for CVP (migrant) and AI = 5.
- " Greater Sandhill Crane (LCRVP) (breeding) to High because Focal in ID and NV and AI = 5.
- " Greater S and hill Crane (LCR VP) (migrant) to Mo derate because Focal in NV and AI = 5.
- " Greater Sandhill Crane (RMP) to Moderate because Focal in ID and AI = 3.
- " Lesser S and hill Crane (PFP) to High because SE in WA and on Draft CA SC list, and AI = 5.
- " Yellow Rail to High because on National and Region 1 BCC lists, SC in OR, and AI = 5. Also SC in CA but extirpated (Mono County).
- " Virgina Rail, Sora, Common Moorhen, American Coot, Pied-billed Grebe to Not at Risk because of lack of data.
- " Red-necked Grebe and Horned Grebe to Low because SC in OR.
- " Least Bittern to Moderate because SC in OR and on Draft CA SC list.
- " American Bittern to Low because Focal in ID.
- " Common Loon to High because SC in ID and WA, on Draft CA SC list, and mercury contamination threat at Walker Lake, NV.

Table 15. Concern Matrix for waterbirds in Bird Conservation Region 10 (breeding species unless noted as migrant or both breeder and migrant; b = breeding, m = migrant).

	GLOBAL DISTRIBUTION							
Concern Category	North America	Western Hemisphere	Northern Hemisphere	Cosmopolitan	Perip heral			
High Concern	Greater Sandhil Crane (RMP) American White Pelican	Frank lin s G ull	Common Loon					
Moderate Concern	Greater Sandhil Cmne (CVP) Ca lifomia Gull Fors ter s Tern American Bittern	Snowy Egret Great Blue Heron White-faced Ibis	Horned Grebe	Caspian Tern Black Tern Black-crowned Night-Heron				
Low Concern	GreaterSandilCrane (LCRVP) Western Grebe Clark s Grebe		Red-nec ked Greb e	Eared Grebe				
Not at Risk	Sora American Co ot Rin g-b illed Gu ll Bonap arte s Gull (m) Double-crested Cormo rant	Virg inia R ail Pied-billed Grebe		Cattle Egret	Herring Gull(m)			

¹ Changes in rankings for colonial species:

- " Herring Gull to Not at Risk because migrant and Peripheral because of rarity.
- " Bonaparte s Gull to Not at Risk because migrant.
- " Franklin s Gull to High because SC in MT and Focal in ID, MT and Central Rocky Mountains PIF plans
- " Cas pian Tern to Not at Risk because AI = 1, but to Moderate because on MT, WY SC lists and Focal for MT.
- " Forster's Term to Low because AI = 1, but to Moderate because SC and Focal in MT and WY.
- " Black Term to Low because AI = 1, but to Moderate because SC and Focal in ID, MT, WY.
- " Eared Gre be and Western Grebe to Low because AI = 1.
- " Clark s Grebe to Not at Risk because AI = 1, but to Low because SC in WY and Focal in MT.
- " Snowy Egret to Moderate because AI = 1.
- " Great Blue Heron to Moderate because of moderate threat of potential loss of riparian forests.
- " White-faced I bis to Moderate because SC in MT and WY and Focal in ID and MT.
- " American White Pelican to High because SC in MT and WY and Focal in Central Rocky Mountains and Wyoming Bas in PIF plans.

Rankings for marshbirds:

- " Greater Sandhill Crane (CVP) to Moderate because SC in OR and AI = 2.
- " Greater Sandhill Crane (LCRVP) to Low because Focal in ID.
- " Greater S and hill Crane (RMP) to High b ecause Focal in ID and AI = 5.
- " Virginia Rail, Sora, American Coot, and Pied-billed Grebe to Not at Risk because of lack of data.
- " Red-necked Grebe to Low because Focal in ID.
- " Horne d Grebe to Moderate because SC in OR and Focal in MT.
- " American Bittern to Moderate because SC in WY and Focal in ID, MT, and WY.
- " Common Loon to High because SC in ID, MT, WA, and WY, and Focal in MT, and because of disturbance threats.

Table 16. Concern Matrix for waterbirds in Bird Conservation Region 15 (breeding species unless noted as migrant or both breeder and migrant; b = breeding, m = migrant).

	GLOBAL DISTRIBUTION								
Concern Category	North America	Western Hemisphere	Northern Hemisphere	Cosmopolitan	Perip heral				
High Concern	GreaterSandhil Crane (CVP) Western Grebe Clark s Grebe		Common Loon (m)						
Moderate Concern				Black Tern					
Low Concern	Ca lifo mia Gu ll Fors ter s Tern	White-faced Ib is		Eared Grebe Black-crowned Night-Heron					
Not at Risk	Sora American Coot Ring-b illed Gu ll Bonaparte s Gull (m) Double-crested Cormo rant American Bittern	Virg inia R ail Pied-billed Grebe Snowy Egret(m) Great Bhe Heron	Lesser SandhilCrane (m)	Caspian Tern(m) Great Egret Cattle Egret(m)					

¹ Changes in rankings for colonial species:

- " California Gull, Forster's Tern, Eared Grebe, and Black-crowned Night-Heron to Low because AI = 1.
- " Bonaparte s Gull, Caspian Tern, Snowy Egret, Cattle Egret to Not at Risk because migrants or unknown breeding status.
- " Black Tern to Low because AI = 1, but to Moderate because 3rd priority on Draft CA SC list.
- " Western and Clark's Grebe to High because of water level fluctuation and disturbance issues (Ivey 2004).

Rankings for marshbirds:

- " Greater Sandhill Crane (CVP) to High because ST in CA.
- " Lesser Sandhill Crane (PFP) to Moderate because 2nd priority on Draft CA SC list, but unsure of status in BCR and migrant, so to Not at Risk.
- " Virginia Rail, Sora, American Coot, Pied-billed Grebe, and American Bittern to Not at Risk because of lack of data.
- " Common Loon to High because on extirpated priority on Draft CA SC list.

Table 17. Concern Matrix for waterbirds in Bird Conservation Region 16 (breeding species unless noted as migrant or both breeder and migrant; b = breeding, m = migrant).

	GLOBAL DISTRIBUTION						
Concern Category	North America	Western Hemisphere	Northern Hemisphere	Cosmopolitan	Perip heral		
High Concern	American Bittern Greater Sandhill Crane (RMP) (m)				Great Egret (m)		
Moderate Concern	Greater Sandhill Crane (RMP) (b) Western Grebe Clark's Grebe Green Heron American White Pelican	Snowy Egret Least Bittern		Black-crowned Night-Heron	Little Blue Heron		
Low Concern	Sora Ca lifo mia Gu ll Fors ter s Tern	Virg inia R ail Frank lin s G ull Wh ite-fac ed Ib is	Sandhil Crane (MCP) (m) Common Loon (m)	Black Tern Eared Grebe			
Not at Risk	American Co ot Ring-billed Gull (m) Double-crested Cormo rant	Common Moorhen Pied-billed Grebe Great Blue Heron		Cattle Egret	Bonaparte s Gull(m)		

¹Changes in rankings for colonial species:

- " California Gull, Franklin s Gull, Forster s Tern, Black Tern, and Eared Grebe to Low Concern because AI = 1.
- " Bonaparte's Gullto Not at Risk because migrant, and Peripheral because of rarity.
- " Clark s Grebe to Moderate because SC in AZ and Focal in NM, and Western Grebe also to Moderate because shares issues and managed together.
- " Little Blue Heron to Moderate because AI = 1, but Peripheral because of rarity.
- " Snowy Egret to Moderate because AI = 1.
- " Great Egret to High because SE in AZ, but to Peripheral fide D. Krueper.
- " Green Heron to Low because AI = 1, but to Moderate fide D. Kruep er.
- " American White Pelican to Low because AI = 1, but SC and Fo cal in UT so Moderate.

Rankings for marshbirds:

- " Greater Sandhill Crane (RMP) (b) to Moderate because SC in CO and historic range contraction.
- " Greater Sandhill Crane (RMP) (m) to High because SC in CO and AI = 5.
- " Sandhill Crane (MCP) to Low as low numbers stage fide D. Krueper.
- " Virginia Rail and Sora to Low fide D. Krueper.
- " Common Moorhen, American Coot, Pied-billed Grebe to Not at Risk because of lack of data.
- " Least Bittern to Low because SC in AZ, but to Moderate fide D. Krueper.
- " American Bittern to Moderate because SC in AZ and Fo cal in AZ and NM, but to High Fide D. Krueper.
- " Common Loon to Low fide D. Krueper.

Final waterbird priority list for each BCR. Table 18 is the list of the priority waterbird species for each BCR in the Intermountain West, based on the information from the previous tables.

Table 18. List of priority waterbird species in each Bird Conservation Region (BCR) of the Intermountain West (breeding species unless noted as migrant or both breeder and migrant; b = breeding, m = migrant).

Concern Category	BCR 9	BCR 10	BCR 15	BCR 16
High Concern	Greater Sandhill Crane (CVP) (b, m) Greater Sandhill Crane (LCRVP) (b) Lesser Sandhill Crane (PFP) (m) Yello w R ail Frank lin s G ull Black Tern Eared Grebe (m) Western Grebe Clark s Grebe Snow y Egret White-fac ed Ib is American White Pelican (b, m) Common Loon (b, m)	GreaterSandhil Crane(RMP) Franklin s G ull American White Pelican Common Loon	Greater Sandhil Cmne (CVP) Western Grebe Clark s Grebe Common Loon (m)	Greater Sandhill Crane (RMP) (m) American Bittern
Moderate Concern	Greater Sandhill Crane (LCR VP) (b) Greater Sandhil Cmne (RMP) California Gull Forster s Tern Red-necked Grebe Great Bhe Heron Black-crowned Night-Heron Least Bittern	GreaterSandhil Crane(CVP) California Gull Casp ian Tern Forster s Tern Black Tern Snow y Egret Great Blue Heron Black-crowned N ight-Heron American Bittern White-fac ed lb is	Black Tern	Greater Sandhil Crane (RMP) (b) Western Grebe Clark s Grebe Snowy Egret Green Heron Black-crowned Night-Heron Least Bittern American White Pelican
Low Concern	Casp ian Tern Horned Grebe Eared Grebe (b) American Bittern	Greater Sandhill Cane (LCRVP) Red-necked Grebe Horned Grebe Eared Grebe Western Grebe Clark s Grebe	California Gull Forster s Tern Eared Grebe Black-crowned Night-Heron White-faced Ibis	Sandhil Crane (MCP) (m) Virg inia R ail Sora Ca lifo mia Gu ll Frank lin s G ull Fors ter s Tern Black Tern Eared Greb e White-fac ed Ib is Common Loon (m)

POPULATION AND HABITAT OBJECTIVES

Population objectives

Individual species approach. Numerical population objectives provide measurable, scientifically-based targets for use in conservation planning. These objectives function as marketing tools, as a basis for setting habitat objectives, and as performance indicators. They need to be understandable, measurable, and consistent with agency and other plans (e.g., recovery plan goals for endangered species, flyway plans). During planning meetings, a consensus was reached by the Regional Waterbird Working Group to use the PIF approach to objective setting, with some necessary modifications.

- In the PIF approach, population objectives are based on the degree of population change or population trend (PT), indicated by Breeding Bird Survey (BBS) data since 1966, and objectives were defined for different PT levels. The overall objective is to return populations towards historic levels in the early BBS years (1966-68). However, in most cases, BBS data is poor as an index to waterbird population trends, and most historic waterbird populations suffered their greatest declines before BBS was initiated. Also, since most waterbird species are long-lived (K-selected species), their populations change more slowly than landbirds, so it is appropriate to use a longer period to evaluate population trends. Therefore, we chose 50 years for the period to recover these long-lived species. Revised PT index definitions are in Table 19.
- " The group also decided that population objectives were not needed for Low Concern, Not at Risk, or Peripheral species. Low Concern species will be included in monitoring objectives.
- " If state plans had established a PT score, this was used, although some are based on BBS data which may be misleading.
- For priority migrant species, we did not set numeric population objectives, but will set habitat objectives in the habitat objective section. These species were ranked as PT = 3 with an objective to maintain or increase their current numbers.
- For some breeding species that were extirpated in a state, a PT of 5 was assigned (e.g., Common Loon in California and Oregon in BCR 9).
- " Western and Clark s grebes were assigned the same ranking in each BCR because they have similar habitat requirements and would mutually benefit from management actions.
- " Because most of the data quality is poor (3 or less), objectives derived from these estimates should be considered interim until better data is available.

Justifications for species PT scores are in Tables 20-23. Tables 24-27 summarize population objectives derived using this process for each BCR by state, while Table 28 summarizes population objectives for each state by BCR. Numbers for each state were based on current data from each as a contribution to the entire BCR. They were rounded off to the nearest ten and then added together for a total objective for each BCR.

Please carefully review and comment on the following draft criteria definitions in Table 18 for defining population trend to be used for categorizing assignment of objective levels. See also the justification write-ups for each species by BCR below.

Table 19. Definitions of population trend (PT) indices for high and moderate priority waterbird species in the Intermountain West Region Waterbird Conservation Plan, and guidelines for establishing numerical population objectives.

PT index	Definition	Population objective criteria
PT = 5	Species with biologically significant population decline since settlement, or have experienced significant range contraction. This includes species that were severely impacted by market hunting, habitat loss, and contaminants (primarily DDT-DDE), and also with evidence of recent declines.	Double the current population over the next 50 years.
PT = 4	Species with possible or moderate population decline, or species that experienced significant historic declines which have not fully recovered, but show an increasing trend.	Increase the current population by 50% over the next 50 years.
PT = 3	Species with uncertain or unknown past trend or which historically declined and have apparently recovered with stable trends. Priority migrant species are also included, but will not receive numerical objectives (only habitat objectives).	Maintain or increase the current population over the next 50 years while simultaneously improving our knowledge of population status.
PT = 2	Species with possible or moderate increase.	Maintain the current population over the next 50 years.
PT = 1	Species with large population increase.	Maintain the current population over the next 50 years.

PLEASE CAREFULLY REVIEW THE FOLLOWING JUSTIFICATIONS FOR RANKING POP. TREND (PT) SCORES FOR HIGH AND MODERATE CONCERN SPECIES FOR EACH BCR.

- " WHICH SPECIES SHOULD BE DOUBLED. WHICH SHOULD INCREASE BY 50%? WHAT OBJECTIVES MAY NOT BE FEASIBLE (E.G., INCREASE SANDHILL CRANES BY 50%IN BCR 9).
- " DO ANY SPECIES (E.G., CORMORANTS) NEED TO HAVE A REDUCE POPULATION OBJECTIVE?
- " HOW WOULD YOU CHANGE DEFINITIONS TO BETTER FIT BIRDS INTO OBJECTIVE CATEGORIES?
- " ALL HIGH AND MODERATE CONCERN MIGRANT SPECIES WERE PLACED IN PT = 3 SO THAT THE OBJECTIVE IS TO MAINTAIN OR INCREASE CURRENT NUMBERS. HABITAT OBJECTIVES WILL BE THE FOCUS FOR THIS GROUP. DOES THIS MAKE SENSE?
- " ALL LOW CONCERN AND NOT-AT-RISK SPECIES WILL BE CONSIDERED IN PT = 3 SO THAT THE OBJECTIVE IS ONLY TO MAINTAIN CURRENT NUMBERS. DOES THIS MAKE SENSE?
- " FOR PRIORITY SPECIES WHICH ARE STAGING (NOT BREEDING), THE OBJECTIVE SHOULD BE TO MAINTAIN STAGING HABITAT FOR AT LEAST THE CURRENT POPULATION LEVELS AND NO NUMERIC OBJECTIVE IS ASSIGNED. I DON T THINK WE SHOULD DERIVE INCREASED NUMERIC OBJECTIVES FOR STAGING NUMBERS BECAUSE POPULATIONS ARE LIKELY MORE DEPENDENT ON BREEDING AND WINTERING AREAS. FOR EXAMPLE, LESSER SANDHILL CRANES IT WOULD MAKE NO SENSE TO GIVE THEM A PT=4 AND HAVE AN INCREASED OBJECTIVE OF 37,500

BECAUSE ENHANCING STAGING HABITAT WOULD NOT LIKELY DIRECTLY LEAD TO INCREASING POPULATION.

- " WHAT ABOUT THE 30-YEAR PERIOD?
- " RESTORING HISTORIC POPULATIONS MAY NOT BE FEASIBLE FOR MANY SPECIES. WHICH? WE OFTEN DON T KNOW WHAT HISTORICAL NUMBERS ARE.
- " SHOULD THERE BE A MINIMUM NUMBER? FOR EXAMPLE, FOR CLARK S GREBE IN NEW MEXICO THE OBJECTIVE IS 10.

Table 20. Justification for population trend (PT) scores for high and moderate priority waterbird species in Bird Conservation Region (BCR) 9. Some species are not listed even though they may have special state status.

Species	PT index	Trend justification
Greater Sandhill Crane (CVP) (b)	PT = 5	WA: Extreme historic declines due to market hunting and habitat loss (Littlefield and Ivey 2002). State recovery plan set population objective. $PT = 5$.
	PT = 4	CA: Historic declines due to market hunting and habitat loss (Littlefield and Ivey 2002). Recent breeding surveys (Ivey and Herziger 2001) suggest potential for expansion into former range. PT = 4.
		NV: Historic declines due to market hunting and habitat loss (Littlefield and Ivey 2002). Potential for expansion into former range. PT =4.
	PT = 3	OR: Historic declines due to market hunting and habitat los s (Littlefield and Ivey 2002). Recent breeding surveys (Ivey and Herziger 2000) s uggest remaining available habitat is close to saturation in the state. PT = 3.
Greater Sandhill Crane (CVP) (m)	PT = 3	CA, OR: Migrant. PT = 3.
Greater Sandhill Crane (LCRVP) (b)	PT = 4	ID: PT set at 4 (Idaho PF 2000). PT = 4.
		NV: Recovering from historic declines, now overall trend is stable (Pacific Flyway C ouncil 1995). Potential for expansion into former range. PT = 4.
	PT = 3	UT: PT set at 3 (Parrish et al. 2002). PT = 3.
Greater Sandhill Crane (RMP) (b)	PT = 4	ID: PT set at 4 (Idaho PF 2000). PT = 4.
	PT = 3	UT: PT set at 3 (Parrish et al. 2002). PT = 3.
Lesser Sandhill Crane (PFP) (m)	PT = 3	CA, OR, WA: Migrant. PT = 3.
Yellow Rail (b)	PT = 5	CA: Former nesting Mono County (Grinnell and Miller 1944). PT = 5.
	PT = 3	OR: Uncertain trend. PT = 3.
California Gull (b)	PT = 3	ID: PT set at 3 (Idaho PF 2000). PT = 3.
	PT = 1	CA, NV, OR, WA: Increasing trend. PT = 1.
		UT: PT set at 1 (Parrish et al. 2002). PT = 1.
Franklin s Gull (b)	PT = 3	ID: PT set at 3 (Idaho PF 2000). PT = 3.
		UT: PT set at 3 (Parrish et al. 2002). PT = 3.
	PT = 1	CA: First nesting at Lower Klamath NWR in 1990. Over 150 in Klamath Basin in 2003 (Shuford et al. 2004). PT = 1.
		OR: First ne sting at Malheur N WR in 1947, signific antly increasing trend (Ivey and Herziger 2003c). PT = 1.
Forster s Tern (b)	PT = 3	CA, NV, OR, WA: Uncertain trend. PT = 3.
		ID: PT set at 3 (Idaho PF 2000). PT = 3.
		UT: PT set at 3 (Parrish et al. 2002). PT = 3.
Black Tern (b)	PT = 4	CA: Declining (Shuford 1999). PT = 4.
	PT = 3	ID: PT set at 3 (Idaho PF 2000). PT = 3.
		NV, OR, WA: Equivocol or unknown (Shuford 1999). PT = 3.
		UT: PT set at 3 (Parrish et al. 2002). PT = 3.

Eurou Greece (iii)	Eared Grebe (m)	PT = 3	CA, NV , OR , UT , WA : $Migrant. PT = 3$.
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Table 20. Justification for population trend (PT) scores for high and moderate priority waterbird species in Bird Conservation Region (BCR) 9 (cont.). Some species are not listed even though they may have special state status.¹

Species	PT index	Trend justification
Western Grebe (b)	PT = 4	CA, OR: Historic declines due to market hunting and contaminants, current threats such as water drawdown (Ivey 2004). PT = 4.
		ID: PT set at 3 (Idaho PIF 2000), but recent water level draw downs and boating disturbance issues (C. Moulton, pers. comm.). PT = 4.
		NV: Historic decline (e.g., Topaz Lake). PT = 4.
	PT = 3	UT: PT set at 3 (Parrish et al. 2002). PT = 3.
		WA: Unknown trend. PT = 3.
Clark s Grebe (b)	PT = 4	CA, OR: Historic declines due to market hunting and contaminants, current threats such as water drawdown (Ivey 2004). PT = 4.
		ID: PT set at 3 (Idaho PIF 2000), but recent water level drawdowns and boating disturbance issues (C. Moulton, pers. comm.). PT = 4.
		NV: Historic decline (e.g., Topaz Lake). PT = 4.
	PT = 3	UT: PT set at 3 (Parrish et al. 2002). PT = 3.
		WA: Unknown trend. PT = 3.
Snowy Egret (b)	PT = 4	OR: Historic declines due to market hunting in the late 1800s near Malheur Lake, nesting did not resume until 1941 (Herziger and Ivey 2003e). Recent decline at Malheur NWR (G. Ivey, unpub. data). PT = 4.
	PT = 3	ID: PT set at 3 (Idaho PF 2000). PT = 3.
		NV: Unknown trend. PT = 3.
	PT = 1	UT: PT set at 1 (Parrish et al. 2002). PT = 1.
Great Blue Heron(b)	PT = 3	CA, ID, NV, OR, WA: Uncertain trend. PT = 3.
		UT: PT set at 3 (Parrish et al. 2002). PT = 3.
Black-crowned Night-Heron (b)	PT = 3	CA, ID, NV, OR, WA: Uncertain trend. PT = 3.
		UT: PT set at 3 (Parrish et al. 2002). PT = 3.
Least Bittern (b)	PT = 3	CA, ID, NV, OR, UT: Uncertain trend. PT = 3.
White-faced Ibis (b)	PT = 3	CA, NV, OR: Historic declines due to market hunting, contaminants. Recent increasing trend suggests recovery of this species (Ivey et al. 2004). PT = 3.
		ID: PT set at 3 (Idaho PF 2000). PT = 3.
		UT: PT set at 3 (Parrish et al. 2002). PT = 3.

Table 20. Justification for population trend (PT) scores for high and moderate priority waterbird species in Bird Conservation Region (BCR) 9 (cont.). Some species are not listed even though they may have special state status.

Species	PT index	Trend justification
American White Pelican (b)	PT = 4	CA: Formerly nested at Eagle Lake, Honey Lake WA (PRBO 2003) and Goose Lake. Declines due to disturbance, harrassment by fishermen, contaminants. PT = 4.
		OR: C ommon Malheur Lake late 1800s, no colonies in state by 1932 due to drought and draining, resu med ne sting Upper K lamath Lake 1934, sporadic Malheur Lake and abando ned 1960, resumed 1985 (Herziger and Ivey 2003b). Declining trend in recent years (G. Ivey, unpub. data). PT = 4.
		WA: Extirpated from two sites, started nesting at new island in 1994 (Doran et al. 2004). PT = 4.
	PT = 3	ID: PT set at 3 (Idaho PF 2000). PT = 3.
		NV: Unknown trend. PT = 3.
		UT: PT set at 3 (Parrish et al. 2002). PT = 3. UT. State PIF plan set population objective.
American White Pelican (m)	ļ	
	PT = 3	UT: Migrant. PT = 3.
Common Loon(b)		
	PT = 5	CA: Historic declines, now extirpated (PRBO 2003). PT = 5.
		OR: H istorically probable bre eder Malheur Lake, present at C ascade Lakes, breeding range from northern C alifornia to British Columbia (Gabrielson and Jewett 1940), no recent records (Mernifield 2003). PT = 5.
	PT = 4	WA: Trend unknown, but formerly more widely distributed (Richardson et al. 2000). PT = 4.
Common Loon (m)		
	PT = 3	ID, NV, UT, WA: Migrant. PT = 3.

¹ Exceptions to BCR 9 list:

[&]quot; Greater Sandhill Crane (LCRVP) (m) is Focal in NV, but migrant in BCR 9.

[&]quot; Ring-billed Gull is Focal in ID, but Not at Risk in BCR 9.

[&]quot; Caspian Tern is Focal in ID, but Low Concern in BCR 9.

[&]quot; Red-necked Grebe and Homed Grebe are SC in OR, but Low Concern in BCR 9.

[&]quot; Eared Grebe (breeding) is Focal in ID, but Low Concern in BCR 9.

[&]quot; Great Egret is SC in ID, but Not at Risk in BCR 9.

[&]quot; American Bittern is Focal in ID, but Low Concern in BCR 9.

Table 21. Justification for population trend (PT) scores for high and moderate priority waterbird species in Bird Conservation Region (BCR) 10. Some species are not listed even though they may have special state status.¹

Species	PT index	Trend justification
Greater Sandhill Crane (CVP) (b)	PT = 3	OR: Historic declines due to market hunting and habitat loss (Littlefield and Ivey 2002). Recent breeding surveys (Ivey and Herziger 2000) suggest remaining available habitat is close to saturation in the state. PT = 3.
Greater Sandhill Crane (LCRVP) (b)	PT = 4	ID: PT set at 4 (Idaho PF 2000). PT = 4.
Greater Sandhill Crane (RMP) (b)	PT = 4	ID: PT set at 4 (Idaho PF 2000). PT = 4.
		WY: Historic de clines du e to mark et hunting and habitat loss (Ivey and Littlefield 2002). Population may have recovered, but potential for expansion into former range (R. Drewien, pers. comm.). PT = 4.
	PT = 2	MT: PT set at 2 (Montana PF 2002). PT = 2.
California Gull (b)	PT = 3	ID: PT set at 3 (Idaho PF 2000). PT = 3.
		MT: PT set at 3 (Montana PF 2002). PT = 3.
		WY: Uncertain trend. PT = 3.
Franklin s Gull (b)	PT = 4	MT: PT set at 4 (Montana PF 2002). PT = 4.
	PT = 3	ID: PT set at 3 (Idaho PF 2000). PT = 3.
Caspian Tern (b)	PT = 3	MT: PT set at 3 (Montana PF 2002). PT = 3.
		WY: Uncertain trend. PT = 3.
Forster s Tern (b)	PT = 3	MT: PT set at 3 (Montana PF 2002). PT = 3.
		WY: Unknown (Nicholoff 2003). PT = 3.
Black Tern (b)	PT = 3	ID: PT set at 3 (Idaho PF 2000). PT = 3.
		MT, WA, WY: Equivocol or unknown trend (Shuford 1999). PT = 3.
Horned Grebe (b)	PT = 3	ID, OR, WA: Uncertain trend. PT = 3.
		MT: PT set at 3 (Montana PIF 2002). PT = 3.
Snowy Egret (b)	PT = 3	ID: PT set at 3 (Idaho PF 2000). PT = 3.
		WY: Uncertain trend. PT = 3.
Great Blue Heron(b)	PT = 3	ID, WA: Uncertain trend. PT = 3.
		MT: PT set at 3 (Montana PF 2002). PT = 3.
Black-crowned Night-Heron (b)	PT = 3	ID, WY: Uncertain trend. PT = 3.
		MT: PT set at 3 (Montana PF 2002). PT = 3.
American Bittern (b)	PT = 3	ID, OR, WA: Uncertain trend. PT = 3.
		MT: PT set at 3 (Montana PF 2002). PT = 3.
		WY: Unknown (Nicholoff 2003). PT = 3.

Table 21. Justification for population trend (PT) scores for high and moderate priority waterbird species in Bird Conservation Region (BCR) 10 (cont.). Some species are not listed even though they may have special state status.

Species	PT index	Trend justification
White-faced Ibis (b)	PT = 3	ID: PT set at 3 (Idaho PF 2000). PT = 3.
		MT: PT set at 3 (Montana PF 2002). PT = 3.
		WY: Uncertain trend. PT = 3.
American White Pelican (b)	PT = 3	MT: PT set at 3 (Montana PF 2002). PT = 3.
		WY: Unknown (Nicholoff 2003). PT = 3.
Common Loon(b)	PT = 4	WA: Trend unknown, but formerly more widely distributed (Richardson et al. 2000). PT = 4.
	PT = 3	ID: Uncertain trend. PT = 3.
		MT: PT set at 3 (Montana PF 2002). PT = 3.
		WY: Unknown (Nicholoff 2003). PT = 3.

¹Exceptions to BC R 10 list:

Table 22. Justification for population trend (PT) scores for high and moderate priority waterbird species in Bird Conservation Region (BCR) 15. Some species are not listed even though they may have special state status.

Species	PT index	Trend justification
Greater Sandhill Crane (CVP) (b)	PT = 4	CA: Historic declines due to market hunting and habitat loss (Littlefield and Ivey 2002).
Black Tern (b)	PT = 4	CA: Evidence of decline (Shuford 1999). PT = 4.
Western Grebe (b)	PT = 4	CA: Historic declines due to market hunting and contaminants, current threats such as water drawdown (Ivey 2004). PT = 4.
Clark s Grebe (b)	PT = 4	CA: Historic declines due to market hunting and contaminants, current threats such as water drawdown (Ivey 2004). PT = 4.
Common Loon (m)	PT = 3	CA: Migrant PT = 3.

¹ Exceptions to BCR 15 list:

[&]quot; Greater Sandhill Crane (LCRVP) is Focal in ID, but Low Concern in BCR 10.

[&]quot; Ring-billed Gull is Focal in ID, but Not at Risk in BCR 10.

[&]quot; Red-necked Grebe is Focal in ID, but Low Concern in BCR 10.

[&]quot; Eared Grebe (breeding) is Focal in ID, but Low Concern in BCR 10.

[&]quot; Western Grebe is Focal in ID, but Low Concern in BCR 10.

[&]quot; Clark s Grebe is SC and Focal in MT, but Low Concern in BCR 10.

[&]quot; Lesser Sandhill Crane (PFP) is SC in CA, but unsure of status in BCR.

Table 23. Justification for population trend (PT) scores for high and moderate priority waterbird species in Bird Conservation Region (BCR) 16. Some species are not listed even though they may have special state status.

Species	PT index	Trend justification
Greater Sandhill Crane (RMP) (b)	PT = 4	CO: Historic declines due to market hunting and habitat loss (Ivey and Littlefield 2002). Population may have recovered, but potential for expansion into former range (R. Drewien, pers. comm.). PT =4.
Greater Sandhill Crane (RMP) (m)	PT = 3	CO: Migrant. PT = 3.
Western Grebe (b)		AZ, CO: Uncertain trend. PT =3.
		UT: PT set at 3 (Parrish et al. 2002). PT = 3.
Clark s Grebe (b)	PT = 3	AZ, CO, NM: Uncertain trend. PT =3.
Snowy Egret (b)	PT = 3	CO, NM, UT: Uncertain trend. PT = 3.
Green Heron (b)	PT = 3	CO, NM: Uncertain trend. PT = 3.
Black-crowned Night-Heron (b)	PT = 3	CO, NM: Uncertain trend. PT = 3.
		UT: PT set at 3 (Parrish et al. 2002). PT = 3.
Least Bittern (b)	PT = 3	AZ, CO, NM, UT: Uncertain trend. PT = 3.
American Bittern (b)	PT = 5	AZ: Extirpated. PT = 5.
	PT = 3	CO, NM, UT: Uncertain trend. PT = 3.
American White Pelican(b)	PT = 3	CO: Uncertain trend. PT = 3.

¹ Exceptions to BCR 16 list

[&]quot; Greater Sandhill Crane is SC in CO but MCP is not named by subspecies, and is Low Concern in BCR 16.

[&]quot; Snowy Egret is SC in AZ, but does not breed in BCR 16.

[&]quot; Great E gret is SE in AZ, but peripheral.

[&]quot; White-faced Ibis is Focal in NM, but Low Concern in BCR 16.

[&]quot; American White Pelican is SC and Focal in UT, but does not breed in BCR 16.

Table 24. Population objectives for high and moderate priority waterbird species in the Intermountain West Region, Bird Conservation Region 9. HO = Habitat objectives only because migrant. TBE = To Be Established (after data becomes available or species resumes nesting).

Species	Objective #	CA	ID	NV	OR	UT	WA
Greater Sandhill Crane (CVP) (b)	4,500	1,670		30	2,590		260¹
Greater Sandhill Crane (CVP) (m)	НО	НО			НО		
Greater Sandhill Crane (LCRVP) (b)	TBE		TBE	TBE		TBE	
Greater Sandhill Crane (LCRVP) (m)	НО			НО			
Greater Sandhill Crane (RMP) (b)	TBE		TBE			TBE	
Lesser Sandhill Crane (PFP) (m)	НО	НО			НО		НО
Yellow Rail (b)	520	TBE			520		
California Gull (b)	308,060	62,470	72,400	4,200	4,990	150,000	14,000
Franklin s Gull (b)	42,070	150	8,000		3,270	30,650	
Forster s Tern (b)	7,000	3,210	40	150	1,610	1,590	400
Black Tern (b)	7,770	5,550	160	550	1,090	120	300
Eared Grebe (m)	НО	НО		НО	НО	НО	НО
Western Grebe (b)	13,940	6,960	1,790	80	3,710	400	1,000
Clark s Grebe (b)	3,460	720	710	450	1,180	300	100
Snowy Egret (b)	3,150		610	350	250	1,940	
Great B lue Hero n (b)	4,430	110	1,800	600	250	470	1,200
Black-crowned Night-Heron (b)	5,480	310	1,540	800	1,380	450	1,000
Least Bittern (b)	TBE	TBE	TBE	TBE	TBE	TBE	
White-faced Ibis (b)	54,170	2,310	1,530	12,230	18,100	20,000	
Americ an White Pelican (b)	35,430	5,880	2,570	14,130	2,360	10,120 ²	360
American White Pelican (m)	НО					НО	
Common Loon(b)	12	TBE			TBE		12
Common Loon (m)	НО		НО	НО		НО	НО

Objective set in state recovery plan (Littlefield and Ive y 2002).

² Objective set in state PIF plan (Parrish et al. 2002).

Table 25. Population objectives for high and moderate priority waterbird species in the Intermountain West Region, Bird Conservation Region 10. HO = Habitat objectives only because migrant. TBE = To Be Established (after data becomes available or species resumes nesting).

Species	Objective #	ID	MT	OR	WA	WY
Greater Sandhill Crane (CVP) (b)	260			260		
Greater Sandhill Crane (LCRVP) (b)	150	150				
Greater Sandhill Crane (RMP) (b)	TBE	TBE	TBE			TBE
California Gull (b)	14,230	5,000	920			8,310
Franklin s Gull (b)	21,000	15,000	6,000			
Caspian Tern (b)	150		50			100
Forster s Tern (b)	180		130			50
Black Tern (b)	570	20	200		250	100
Horned Grebe (b)	TBE	TBE	TBE	TBE	TBE	
Snowy Egret (b)	70	40				30
Great Blue Heron(b)	1,400	170	900		330	
Black-crowned Night-Heron (b)	520	70	50			400
American Bittern (b)	TBE	TBE	TBE	TBE	TBE	TBE
White-faced Ibis (b)	5,080	4,790	20			270
American White Pelican (b)	10,500		8,000			2,500
Common Loon(b)	260	TBE	200		10	50

Table 26. Population objectives for high and moderate priority waterbird species in the Intermountain West Region, Bird Conservation Region 15. HO = Habitat objectives only because migrant.

Species	Objective #	CA
Greater Sandhill Crane (CVP) (b)	250	250
Black Tern (b)	270	270
Western Grebe (b)	2,170	2,170
Clark s Grebe (b)	20	20
Common Loon (m)	НО	НО

Table 27. Population objectives for high and moderate priority waterbird species in the Intermountain West Region, Bird Conservation Region 16. HO = Habitat objectives only because migrant. TBE = To Be Established (after data becomes available or species resumes nesting).

Species	Objective #	AZ	CO	NM	UT
Greater Sandhill Crane (RMP) (b)	TBE		450		TBE
Greater Sandhill Crane (RMP) (m)	НО		НО		
Western Grebe (b)	380	200	150		30
Clark s Grebe (b)	210	50	150	10	
Snowy Egret (b)	940		400	500	40
Green Heron (b)	220		20	200	
Black-crowned Night-Heron (b)	660		600	40	20
Least Bittern (b)	TBE	TBE	TBE	TBE	TBE
American Bittern (b)	TBE	TBE	TBE	TBE	TBE
American White Pelican (b)	400		400		

Table 28. Population objectives for breeding high and moderate priority waterbird species in the Intermountain West Region by state. TBE = To Be Established (after data becomes available or species resumes nesting).

State	Species	State total	BCR 9 objective	BCR 10 objective	BCR 15 objective	BCR 16 objective
Arizona	Western Grebe	200				200
	Clark s Grebe	50				50
	Least Bittern	TBE				TBE
	Americ an Bittern	TBE				TBE
Californ ia	Greater Sandhill Crane (CVP)	1,920	1,670		250	
	Yellow Rail	TBE	TBE			
	California Gull	62,470	62,470			
	Franklin s Gull	150	150			
	Forster s Tern	3,210	3,210			
	Black T ern	5,820	5,550		270	
	Western Grebe	9,130	6,960		2,170	
	Clark s Grebe	740	720		20	
	Great Blue Heron	110	110			
	Black-crowned Night-Heron	310	310			
	Least Bittern	TBE	TBE			
	White-face d Ibis	2,310	2,310			
	American White Pelican	5,880	5,880			
	Common Loon	TBE	TBE			
Colorado	Greater Sandhill Crane (RMP)	450				450
	Western Grebe	150				150
	Clark s Grebe	150				150
	Snowy Egret	400				400
	Green Heron	20				20
	Least Bittern	TBE				TBE
	Americ an Bittern	TBE				TBE
	Black-crowned Night-Heron	600				600
	American White Pelican	400				400
Idaho	Greater Sandhill Crane (LCRVP)	TBE	TBE	150		
	Greater Sandhill Crane (RMP)	TBE	TBE	TBE		
	California Gull	77,400	72,400	5,000		
	Franklin s Gull	23,000	8,000	15,000		
	Forster s Tern	40	40			
	Black T ern	180	160	20		
	Western Grebe	1,790	1,790			
	Clark s Grebe	710	710			
	Snowy Egret	650	610	40		
	Great Blue Heron	1,970	1,800	170		
	Black-crowned Night-Heron	1,610	1,540	70		
	Least Bittern	TBE	TBE			
	Americ an Bittern	TBE		TBE		
	White-face d Ibis	6,320	1,530	4,790		
	American White Pelican	2,570	2,570			
	Common Loon	TBE		TBE		

Table 28. Population objectives for breeding high and moderate priority waterbird species in the Intermountain West Region by state (cont.). TBE = To Be Established (after data becomes available or species resumes nesting).

State	Species	State total	BCR 9 objective	BCR 10 objective	BCR 15 objective	BCR 16 objective
Montana	Greater Sandhill Crane (RMP)	TBE		TBE		
	California Gull	920		920		
	Franklin s Gull	6,000		6,000		
	Cas pian Tern	50		50		
	Forster s Tern	130		130		
	Black T ern	200		200		
	Great Blue Heron	900		900		
	Black-crowned Night-Heron	50		50		
	Americ an Bittern	TBE		TBE		
	White-face d Ibis	20		20		
	American White Pelican	8,000		8,000		
	Common Loon	200		200		
Nevada	Greater Sandhill Crane (CVP)	30	30			
	Greater Sandhill Crane (LCRVP)	TBE	TBE			
	California Gull	4,200	4,200			
	Forster s Tern	150	150			
	Black T ern	550	550			
	Western Grebe	80	80			
	Clark s Grebe	450	450			
	Snowy Egret	350	350			
	Great Blue Heron	600	600			
	Black-crowned Night-Heron	800	800			
	Least Bittern	TBE	TBE			
	White-face d Ibis	12,230	12,230			
	American White Pelican	14,130	14,130			
New Mexico	Clark s Grebe	10				10
	Snowy Egret	500				500
	Green Heron	200				200
	Black-crowned Night-Heron	40				40
	Least Bittern	TBE				TBE
	Americ an Bittern	TBE				TBE
Oregon	Greater Sandhill Crane (CVP)	2,850	2,590	260		
	Yellow Rail	520	520			
	California Gull	4,990	4,990			
	Franklin s Gull	3,270	3,270			
	Forster s Tern	1,610	1,610			
	Black T ern	1,090	1,090			
	Western Grebe	3,710	3,710			
	Clark s Grebe	1,180	1,180			
	Snowy Egret	250	250			
	Great Blue Heron	250	250			
	Black-crowned Night-Heron	1,380	1,380			
	Least Bittern	TBE	TBE			
	Americ an Bittern	TBE		TBE		
	White-face d Ibis	18,100	18,100			
	American White Pelican	2,360	2,360			
	Common Loon	TBE	TBE			

Table 28. Population objectives for breeding high and moderate priority waterbird species in the Intermountain West Region by state (cont.). TBE = To Be Established (after data becomes available or species resumes nesting).

State	Species	State total	BCR 9 objective	BCR 10 objective	BCR 15 objective	BCR 16 objective
Utah	Greater Sandhill Crane (LCRVP)	TBE	TBE			
	Greater Sandhill Crane (RMP)	TBE	TBE			TBE
	California Gull	150,000	150,000			
	Franklin s Gull	30,650	30,650			
	Forster s Tern	1,590	1,590			
	Black T ern	120	120			
	Western Grebe	430	400			30
	Clark s Grebe	300	300			
	Snowy Egret	1,980	1,940			40
	Great Blue Heron	470	470			
	Black-crowned Night-Heron	470	450			20
	Least Bittern	TBE	TBE			TBE
	Americ an Bittern	TBE				TBE
	White-face d Ibis	20,000	20,000			
	American White Pelican ¹	10,120	10,120			
Washington	Greater Sandhill Crane (CVP) ²	260	260			
	California Gull	14,000	14,000			
	Forster s Tern	400	400			
	Black T ern	550	300	250		
	Western Grebe	1,000	1,000			
	Clark s Grebe	100	100			
	Great Blue Heron	1,530	1,200	330		
	Black-crowned Night-Heron	1,000	1,000			
	Americ an Bittern	TBE		TBE		
	American White Pelican	360	360			
	Common Loon	22	12	10		
Wyoming	Greater Sandhill Crane (RMP)	TBE		TBE		
	California Gull	8,310		8,310		
	Cas pian Te rn	100		100		
	Forster s Tern	50		50		
	Black T ern	100		100		
	Snowy Egret	30		30		
	Black-crowned Night-Heron	400		400		
	Americ an Bittern	TBE		TBE		
	White-face d Ibis	270		270		
	American White Pelican	2,500		2,500		
	Common Loon	50		50		

¹ Objective set in state PIF plan (Parrish et al. 2002).
² Objective set in state recovery plan (Littlefield and Ivey 2002).